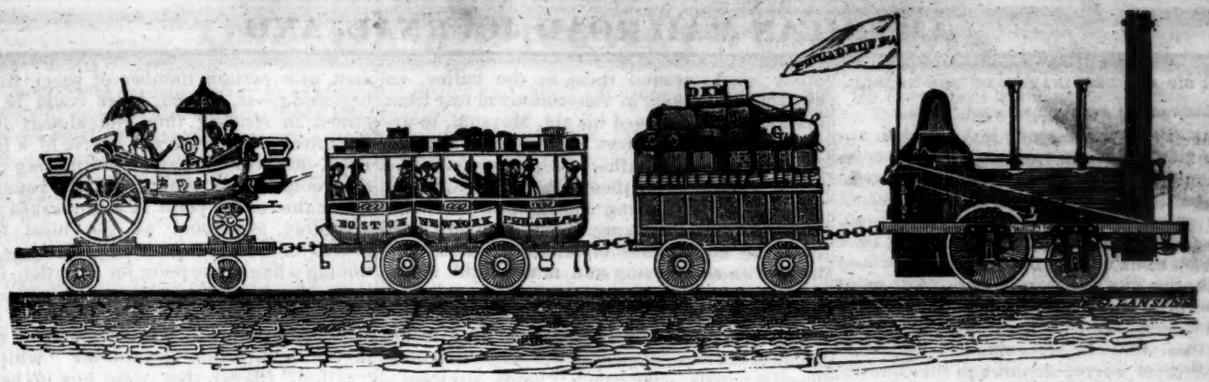

AMERICAN RAILROAD JOURNAL,
AND ADVOCATE OF INTERNAL IMPROVEMENTS.

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AMERICAN RAILROAD JOURNAL, &c.

NEW-YORK, JUNE 28, 1834.

Chesapeake and Ohio Canal.—The following communication gives the rates of tolls on this canal, which may be interesting to many readers of the Journal, as well as a document for future reference. We ask a similar statement for every canal and railroad in the country, and we desire it may be forwarded with the least possible delay. We promise to give an account of *five*, and perhaps more, to every gentleman who furnishes us with *one*, and to pay the *postage* into the bargain.

City of Washington, May 27, 1834.

To the Editor of the Railroad Journal :

Sir,—I forwarded, some time since, by a private conveyance, an answer to your letter asking for information relative to the Chesapeake and Ohio Canal, which gave you such statistical information respecting that grand work as I could collect. I am not aware that it has yet reached you, though it has been nearly a month, if not more, since I wrote it. I could not then get a copy of the rate of tolls demanded on the canal, but having since succeeded, I forward them to you. This rate is only temporarily established, and it is probable, ere long, that a more favorable change will take place. Should you determine on publishing the inclosed, you will be pleased to notice the fact that this arrangement in respect to the tolls is only temporary.

Boats or scows, either empty or having cargoes, the tolls on which shall not pay 5 cents per mile, shall be charged at the rate of 5 cents per mile, and 3 per mile cents for any additional distance, which shall be considered as in lieu of the tolls on such cargoes.

Boats used chiefly for the transportation of passengers shall pay 10 cents per mile for the first 15 miles, and 8 cents per mile for any additional distance, which shall include the toll on passengers and their customary baggage; but all other merchandize transported therein shall pay the established rate of toll.

Articles.	*Quantities.*	*Per mile for first 15 miles.*	*Per mile over 15 miles.*
Tobacco,	per ton of 2 hhds.	2 cents	2 cents
Wheat,	" 40 bushls	2	2
Flour,	" 10 bbls.	2	2
Offals,	" 100 bshls	2	2
Corn Meal & Rye chop,	" 40 "	2	2
Oats,	" 80 "	2	2
Flax and Clover Seeds,	" 40 "	2	2
Hemp and Flax,	" 2240 lbs.	2	2
Potatoes,	" 35 bushls	2	2
Hay and Straw,	" 2240 lbs.	2	1
Wood,	per cord of 128 c. ft.	2	1
Bark (Tanner's),	" " "	3	1
Lumber, Plank,	per 1000 ft. bd. mea.	2	1 cent or if in rafts 2 cents
" Square timber	70 cubic feet		
" Shingles,	3000		
" Laths,	5000		
" BarrelStaves & Headings,	1000		
" Hhd. Staves & Headings,	500		
Charcoal and Coke	per ton of 56 bushls	2	1 cent
Coal,	" 28 "	1	½
Apples,	" 12 bbls.	2	2
Cider Ale and Beer	" 8 "	2	2
Whiskey and Pork,	" 7 barrels or 2 hhds.	2	2
Wine & Foreign Spirits	per tun of 250 galls.	2	2
Live Stock, Cattle,	4 to the ton	2	2
" Sheep,	30 "	2	2
" Hogs,	15 "	2	2
Lime,	per ton of 28 bushls	2	1
Plaster, Stone,	" 2240 lbs	2	1
" Ground,	" 28 bushls		
Stone, Rough,	per ton of 15 cub. ft.	1	½
" Cut or Wrought,	" " "	2	2
" Grind and Mill Stones,	" " "	2	2
Iron, Pig, Castings, and Bars,	per ton of 2240 lbs.	2	2
Salt,	" 35 bushls	2	2
Fish,	" 7 barrels	2	1
All other articles	" 2240 lbs.	2	2

The above rates are established for the present for the use of the canal between the city of Washington and Harper's Ferry Falls; and the same rates per mile will be demanded for the use of any portion of the river between the Little Falls and the Harper's Ferry Falls; for the use of the river above Harper's Ferry Falls, the tolls established by the late Potomac Company will be demanded.

The canal is now in active operation, and will soon, I believe, be opened for several miles above Williamsport, where the slack water navigation of the Potomac is used, (for a distance, I think, of upwards of 7 miles,) making in all a distance, from the Georgetown basin, of upwards of 110 miles.

I have used some exertions to obtain you subscribers, and have had the promises of several to write for your Journal. I hope the patronage of this year will be such as not only to warrant its continuance for years to come, but, at the same time also, a continued improvement in its appearance and contents, such as has marked its progress from its first establishment.

I should like you to have a copy of Dr. Wm. Howard's report on the improvement of the Monongahela River, which is, at present, a favorite project in the western part of Pennsylvania, and one which, if executed, will tend as much as any other work of internal improvement to add to the resources of that region of country, so rich in mineral and agricultural products, and where the arts have attained such perfection. Your obedient servant,

H. N. C.

Internal Improvements.—The Richmond Enquirer states that "the following resolution has been unanimously adopted by the Common Council of this city. They open again the great subject in which the interests of the city and of the whole State are so deeply concerned.

"The act of the Virginia Assembly, which passed the 14th February, 1834, entitled 'An act further to amend the act, entitled 'An act incorporating the Stockholders of the James River and Kanawha Company,' having continued the books of subscription for the stock of said Company open until the 31st December next, and having declared that the payment of one dollar upon each share subscribed by individuals or corporate bodies, at any time before the said 31st December, shall render such subscription valid.

"Resolved, That the Cashier of the Bank of Virginia be, and he is hereby, authorized, to draw on the Chamberlain of this city for the sum of four thousand dollars, payable the first day of November next—it being for one dollar per share on 4000 shares of stock subscribed by the Corporation of Richmond to the James River and Kanawha Company; and that the Chamberlain be directed to accept said draft, and to furnish the Second Auditor with a copy of this preamble and resolution."

A new locomotive Engine has been built at Schenectady, at the workshop of the Mohawk Railroad Company, which bids fair to excel even those of Mr. Stevenson.—[Albany Daily Advertiser.]

A cotton factory has been established at Greensborough, N. C. It has five hundred and twenty-eight spindles in operation, and is capable of manufacturing between two and three hundred pounds of thread per day.

ON THE DIP AND DECLINATION OF THE NEEDLE.

To the Editor of the American Railroad Journal:

Sir,—P. G. V., in your last number, appears anxious that the variations of the compass should be taken by practical surveyors in the United States in June and December, so that in a few years the long sought for problem may be settled. He may in a short time learn, from some observations which have been made in the city of Philadelphia, with great care, several times in the day, for nearly a year past, much of what he wishes to know; and further, that the irregular and disjointed observations of surveyors through the country, giving what they might suppose to be the correct variation of a place, could not be relied on, as it has been known to vary as much as ten minutes in half an hour. To obtain the correct variation, a number of regular observations daily for a length of time would be required, and then a few observers through the country would answer all necessary purposes. W.

If the writer of the following communication thinks he has reason to complain that it has not sooner appeared, he will please recollect that we too have some cause to complain—not of his communication, for we like that, and should be pleased to receive others upon the same subject, giving a complete history of the process of *railroad making*)—but that he has no name or signature by which he may be known. We like to know our friends, and therefore desire that each should have a "handle" by which we can take hold of him, especially when we have occasion to "handle" him without gloves; he will, therefore, in his next, please to choose one to suit himself, or we shall have to call him the gentleman, not the "fellow," "with the claret-colored coat," or some other distinguished no-party man. He will also please pardon the long delay of his favor, and let us hear from him again soon.

[For the American Railroad Journal.]

In the last, having conducted our exploring party from the head-quarters, Hopeful Town, we left them, along with some of the Directors of the road, enjoying a well provided dinner at Mr. Willis' cottage.

Having finished their rustic feast, the chief, after giving Mr. Wilder his last and particular instructions, summoned the carriage, and with the former occupants, (together with Wilder,) set off at a good speed for the summit of the hills upon which they then were. Here determining the important "point de departe," and setting down W., the chief, (Mr. Safeside,) took an *affectionate* leave of him, wishing, as usual, all success, &c. &c., from thence continuing on the journey to his "other railroad," which by this time wanted his presence. Mr. Policy, the co-assistant, having had, as the sailors say, "*sailed* before," knew well enough that he was losing *little* by being of the party that continued on. One might have almost read in the smirking looks he cast back toward Wilder, they were so expressive, embodied in words like the following: "Now, my *boy*, you have *honor* before you—amuse yourself to your heart's content—a pleasant introduction to the hemlock swamp!"

The whole party, or rather, as it was for the present, parties, had been dismissed early on the afternoon of Mr. Safeside's departure, for the purpose of giving them an opportunity to make some transitory residence sure, but at the same time with strict injunctions to appear at head-quarters early the ensuing morning.

The sun was scarcely peering from behind the thickly foliaged hills in front of Mr. Willis' cottage, its beams yet playing among the misty scuds around them in the valley, as the young engineer in vice-command rose from his cot, and summoned his aid, Moyston, to arrange the several forces as they were coming in along different paths to the quarters. The bustle of presenting themselves, the ringing of the chains, resounding blows from the axes and hatchets in trying them, and now and then the merry peels of laughter among the men, was an amusing and novel sight to the cottagers, as well also to the little paradise of nature around.

The well provided breakfast over, commenced the final disposition of axes, hatchets, levelling rods, pike staffs, chains, stretchers, (for the chief never would have *these* left behind, even though measuring in mire waist deep,) tripods, and, although mentioned last, of the most importance to old Hardy, the surveyor—the dinner basket: all these to their respective and jealous bearers.

First in the procession, as it turned in a shrubbed lane leading down *in* the valley, was the short and rough looking Hardy, (you well remember his grotesque squab figure, and merry Hogarth face,) with his white staff and glittering brass circumferentor, or 'compa's,' as he termed it, followed by two or three flag-men, with bright hatchets, tastefully slung in leathern belts, nicknamed by their facetious leader "knights of the red," of the "yellow," or of the "white," according to the tints of their several flags. Next were four stout and heavy built chain bearers, with their new shining (for this day) chains, borne by the "hind-men," and the "pins" and vermeil colored tallies by the "fore-men," with hatchets also slung by their sides; after these followed some six or seven "axe-men," with ponderous and new axes thrown across their brawny shoulders; and immediately joining, the "rod-men," with their long white and graduated rods, with bright brass ends, and tastefully colored vanes—these the most important characters of the "force employed." The rear was brought up by Wynn, who, by some unknown means, had contrived to get a hatchet, and not being equally successful in obtaining a belt, he had rigged across his side a sheath made from a purloined end of Mrs. Willis' clothes line. Ambitious also of an honorary badge, we had folded up two or three sheets of paper and tied them around his neck with a piece of red tape; to look as near as possible like the field-books of Moyston, Mr. Wilder, and his surveyor, Hardy. Hardy, who was famed for his knowledge of "blazed faces," of old decayed and antiquated "line trees," and highly conversant in determining overgrown and illegible "line letters," was to appearance the greatest character in the whole party. Intimately acquainted with the country to be explored, and having made his appearance strongly backed by one of the most influential directors, he came with *peculiar* grace into the party; and surely, we cannot covet him his feelings of "elevatedness," (his own words)—they were innocent; his sudden dignity was inspiriting; it was harmless, too, for it was the very summit of his hitherto ambitious dreams; and we were about to say, *of course*—his happiness was complete. Moving on, as was observed, at a quick pace, Hardy soon found the spot that had been described to him, and was just setting his staff in rest as Mr. Wilder commenced the work of the day. Returning after a short examination of the swamp, (for it was a dense hemlock morass through which they were to run their lines,) he began by directing Hardy where to place his compass, arranged the chain-men, and placing his level upon the tripod, made some few more hasty observations; then, taking the flag-men with him, plunged boldly into the dark marsh, having previously given some instruction to Moyston, who remained by the level, respecting the men that were left behind to cut "stakes," &c. Wynn following, was shown, as they proceeded, where to station the axe-men, at a certain number of paces from the beginning,—if, indeed, *paces* could be determined in striding thus ridiculously through the mire. Following the course of a little rivulet, that struggled along murmuring through the roots of the giant trees, the young engineer came to the point he had marked out the preceding afternoon, as the most feasible course for the all-important "main line." Stationing a flag at the point for direction, he gave the remaining force orders to transpose themselves at about equal distances apart, as near as possible in a line with each other, stretching in a direction toward the "white" and "yellow" (flags), that were now to be placed by him intermediately between the places mentioned, which at last, by dint of much noise, bruised *shins*, (we would really not have this terming considered a *vulgarism*, but must absolutely confess we know of no other word by which we could express this *tender* and important, not to mention *prominent*, feature of the human frame, and as we would speak *feelingly* when adverting to it, must remain our only claim to justification,) endangered necks, and great hal-loo-oo-ing, he placed the flags as near the line as circumstances would allow. Then dropping the axe-men in such a manner as to give present satisfaction, orders were given to "clear the way." "Hal-lo-o men, sweep clean the underbrush." "I'll take this tree." "You fall, too, upon that pine," and like observations. Hardy, incensed at some one for not chopping exactly as he wished, fell to, himself, so lustily and so furiously, that, unluckily, by a slant blow, nearly severed one of the chain-men's arms off. A momentary confusion succeeded, but soon all were busy again; and as the lusty axe-men spent their full efforts in vigorous blows upon the deep resounding hemlocks, the high hills and impending rocks along the valley echoed back the fast falling strokes, which in their turn were again sent back—and on—and back—and back—fainter—fainter—till beyond the power of hearing. Then the loud, deep, lengthened *crash* of some giant tree, falling beneath united efforts, and adding its own resilience to the elastic earth, would shake around, the noise sweeping like the pealing of thunder along the echoing mountains. reverberating from cliff to cliff.

Thus having made the first bold stroke, returning to the compass he directed the view toward the far distant flag, then setting down the bearing of the line, notwithstanding Hardy's desire to dispute with the assistant about a second or two, or something still nicer in the point; and after giving a few necessary but here unimportant orders, he requested the surveyor to keep just ahead of the level, and exactly upon the same course, till further orders: at the same time pointing out some objects to be observed, &c. &c. Thus far having suited his mind, he commenced levelling over the cleared way. Here, if you had approached the opening that was made through the thick trees, and as you directed your view down the narrow vista, you would see, at perhaps a considerable distance off, a flag-man standing upon a prostrate trunk of tree, or some other elevated spot, with a soon observed red, or white, perhaps yellow flag, dwindled to a mere spot, moving above his head; again, if attentive, you would catch a glimpse, and now lose it; then, perhaps, in the same line, you would see a different color resting upon the dark green foliage, will-o'-wisp like also, caused by the waving motion of some heavy intervening tree, at whose base the resolute and destructive axe was busy: perhaps as the rays of the sun, now approaching the meridian, found their way through the opening foliage, a gleam of reflected radiance would circle upon the polished plates of the instruments, or, may be, like a bright star upon the brass tipped levelling rod. Here you would see some lusty fellow drawing his midly chaining course through the expressively termed "bad spots" in the swamp:

no way, as Cooper's scout says, "to carcumvent the evil," for the *line* must be measured, and the line *must* be cleared, every one's road sooner or later leads over the same way.

Do you see those fellows following just after little Hardy with his compass? That unfortunate one, (a fore chain-man,) throwing his arm about, (especially as he is out of hearing of the level,) is venting his curses at some innocent root that his chain has got "locked" into: now twitching it with a broad and vigorous sweep, he calls down upon his head the imprecations of the "hind-man," for pulling "*his end*" into a worse state than the fore-man had just unlocked his own from. Then again, as you saw the flags dancing and dodging among the trees, keeping motion with their bearer's gait, you might hear Mr. Hardy's loud clear voice, "Lo-oo the red—fifty feet e-e-ast"—"way ten more;" then in a louder and more agitated manner, "where the d—l are you going; ba-a-ck twenty!" "Hold, you gander—ho-o-o-ld there!"—"Steady so!" and then came the deep collected "down!" This was followed by the mid-man's "east-er," and "we-est-er," and "taut! down! on!" The axe-men's incessant blows, Mr. Hardy and his hind-man's "Lo-oo-os" and "wa-a-a-ys," and the running to and fro of men, gave the scene you beheld quite an animated appearance. It was seldom that you heard the young assistant's voice among the din of the scene; sometimes, however, as he looked far up the line, an undue jerk of the chain, or the chilling sound of an axe falling upon a stone, (none, however, who know not the *value* of a good axe, can comprehend that *chilling* sensation,) would call forth the sharp and clear "hal-lo there, you Jones, or you Stephen!" (addressing the person,) "Moyston, that man must be remembered." These words, although slight, were perfectly intelligible to whom they were meant for. To be sure, you would also hear the "up!" for dinner, and the more gratefully sounding "put up!" at night.

RAILROAD ACROSS THE ISTHMUS OF DARIEN.—We perceive, by the following extract from a Panama paper, that this great enterprize is likely to be undertaken under highly favorable auspices. The results to commerce, from the establishment of a land carriage of this description, between the two great oceans, cannot fail to be of a highly important character.

"To the Deputies of the Provincial Assembly of Panama:

"Gentlemen,—The opening of a carriage road or railway from the Atlantic to the Pacific, has for a long time engrossed the minds of many persons, not only in this capital, but in far distant countries; for knowing the important situation of this province, it is impossible not to conceive the advantages that would accrue, should this new path be opened to general commerce. Such a flattering idea had given rise to various projects to carry this grand work into execution, which have not been realized, perhaps from the lack of a perfect knowledge of the localities, or from a want of sufficient funds, or may be from the political vicissitudes that the country has been subjected to of late. But now that we have fortunately acquired the re-establishment of the empire of the law, and tranquillity has been pretty well secured, I believe that an impulse ought to be given to this interesting undertaking, upon which depends almost the absolute vitality of this declining province.

"With such an object in view, I take the liberty of soliciting that there be granted to me an exclusive privilege, on the same terms that the old chamber of the district granted to Mr. Malcolm M'Gregor, that I might endeavor to get this project put into execution, not doubting that the honorable chamber will receive and protect my request; and being penetrated with its justice and public convenience, will decree favorably. "JUSTO PAREDES.

"Panama, October 2, 1833."

Some days ago, we published an extract from the "Constitucional de Cundinamarca," concerning a project to open a more secure and speedy commercial communication across the Isthmus of Panama. Since then a Panama paper has fallen into our hands, from which we have derived more authentic information regarding this most interesting enterprize. From it we have translated the memorial of Mr. Paredes, which is prefixed to this article. In the same paper, the provincial decree, granting the privilege to that gentleman, also appears, along with a copy of the former one granted to Mr. M'Gregor. The new decree contains some slight modifications of the articles of the old; one of them is, that the road shall reach to the city of Panama, and another, that Mr. Paredes is not bound by the old decree, which only allows two years to carry the project into execution from the day of its passing, otherwise it becomes null and void, but that the new patentee is not bound, nor does he enter into the enjoyment of the privilege until the day that the Governor of the province shall communicate to him that the decree has been approved of by the National Congress.

We feel a considerable degree of pleasure in giving publicity to the Memorial which Mr. Paredes presented to the Provincial Chamber, and which is submitted for approval to the National Congress of New Granada, now sitting, and we cannot for a moment doubt that body will receive kindly a project upon which depends the future happiness, not only of the Isthmus, but also of this Island; for when once such an expeditious communication between the Atlantic and the Pacific shall be opened, will the navigation round Cape Horn be risked, which causes so many dangers and loss of time? Certainly not: for the general deposit will be in this island, from whence will be dispatched the cargoes for the ports in the Pacific, which are now supplied by vessels round the Cape.

It has been also very satisfactory to us to learn that some of the respectable merchants of this city have offered their support to Mr. Paredes, to carry this great work into operation, assuring him that in London a great many more will purchase shares in the company, which, added to those in Jamaica and Panama, will form a sufficient number for the execution of the project, without even counting upon the capitalists of France and the U. States.

We understand that the concessions in favor of the Memorialists could not have been more munificent, whether we consider the extending the privilege to the long period of forty years, or whether we consider the permitting of the exclusive transport of all kinds of merchandize, produce or metals, in carriages belonging to the company. These are truly powerful stimulants, to induce the European and American capitalists to take a considerable share in an enterprize which offers such incalculable advantages. The most authentic accounts that have reached us state that the distance from Porto Bello to Panama is only 14 leagues, and that the expense of putting the plan into active operation will cost nearly half a million of dollars.

The good reputation of Mr. Paredes, his commercial relations with this city, the facility with which he expresses himself in different languages, added to his honorable character and personal activity, incline us to augur well of the undertaking, whilst the grandeur of the enterprize makes us quite sensible of his patriotism, his judgment, and the knowledge which he possesses of the important situation of his country. If every Colombian thought as he does, that country would soon prosper, and instead of civil war and intestine quarrels, peace, good order and tranquillity, and industry, would be established upon the firmest basis.—[Kingston, Jam. Chronicle.]

On the subject of the proposed communication by steamboats between Calcutta and England, the Calcutta Courier of the 23d January has the following paragraph:

STEAM COMMUNICATION WITH ENGLAND.—Capt. Ross has proceeded to Socotra in the pilot brig Henry Meriton, taking with him Capt. Jump, who, we believe, will return in charge of the vessel. Capt. Jump is spoken of as likely to be the future commander of the Forbes on her trips to the Red Sea, for which he has tendered his services. In the mean time, arrangements are making to forward coal to the several depots. The Fette Salem is now receiving 500 tons of English coal for Judda, at the freight of 27 rupees per ton,—a very low rate compared with the terms on which the Red Sea depots were provided for the Hugh Lindsay. A suggestion of Capt. Ross is now under the consideration of the committee, to anticipate the departure of the Forbes on the first trip, by altering the date to the 20th April instead of the 1st May, as lately announced. The motive for the alteration is, that starting on the 20th of April, it is believed that the steamer will be able to get down the bay and clear of Ceylon before the earliest period at which storms are to be apprehended.

We understand that the Merchants' Steam Committee have given in a plan to government, offering to undertake to keep up a quarterly communication with England by the Suez route, both from Calcutta and Bombay, with four large steamers of 800 tons burthen, each of them furnished with a pair of 100-horse engines—one of the steamers to run from Bombay, two from Calcutta, and one between Alexandria and the British Channel,—provided government will give them five lakhs annually in compensation for carrying the mail and all public dispatches.

NATURALIZATION OF FISHES.—At a late meeting of the Zoological Society, were read two letter from Mr. J. B. Arnold of Guernsey, detailing his experiments in the naturalization of sea fishes in a lake chiefly supplied with fresh water. The area of the lake is about five acres; its depth various; and its bottom also various, being muddy, gravelly, and rocky. The water is, during nine months of the year, drinkable for cattle, but in consequence of a supply which it receives through a tunnel communicating with the sea, is rather salt in summer, at which season the fishes do not come down so plentifully as at other times. The fishes introduced into the lake have been the grey mullet, sole, turbot, brill, plaice, basse, smelt, and grey loach. All of these have thriven well, and are believed to have increased in numbers; the grey mullet especially is known to have bred as freely as in the sea itself. A single whiting having been caught for three successive years, was found to have grown considerably; a pilchard also throve well. All the above-mentioned fishes were placed in the lake, except perhaps the brill; but others, as the silver bream, appear to have introduced themselves. It is even suspected that hybrid fishes have been produced, as several have been caught which were unknown to persons well acquainted with the species usually met with on the coast of Guernsey. Mr. Arnold adds that sea fishes, after having been naturalized in his lake, have been transferred to ponds of spring water, where they have not only lived, but done well; and that such naturalized fishes have been carried to a long distance, being much more tenacious of life than those caught in the sea.—[Proc. Zool. Society.]

QUIETUDE.—Happy, indeed, would be the condition of mankind, were all disposed to cultivate that harmony and friendship so desirable and necessary to the welfare and prosperity of society—the world would be similar to a paradise, and the people, if not angels, would approach the character ascribed to them—mankind, as they ought to be considered, would present a band of brothers, happy, quiet and

content. Our citizens, from the highest to the lowest, would be satisfied with their respective stations, and the agitation which now pervades society would rest in quiet and repose.

If there is any quiet on earth, the farmer may be said to enjoy it: with a competence in store, the honest fruits of his industry, he thrives secure from the turmoils of those who pursue other avocations for subsistence. The mechanic, the professional man, and all who support themselves by speculative measures, must expect to contend against the current of disappointment, and prop their sinking hopes by anticipating future prospects, and although their situation may appear enviable to the unscrutinizing eye; on the contrary, they have abundant reason to envy those who live on the fat of the land, enjoying the bounties dealt out by Nature with a liberal hand.

To JOHN O. N. RUTTER, *Wine Merchant, for his Invention of an improved Process for generating Heat, appplicable to the heating of Boilers and Retorts, and to other Purposes for which Heat is required. Sealed March* 30, 1833.

The subject of this patent is the employment of bituminous, resinous, or oily matters, in connection with water as a combustible material, which, it is said, will produce a fuel for furnaces, boilers, &c. capable of giving out a very intense heat. Strange as the suggestion of applying water as a combustible material may appear, it is reported to have been found extremely advantageous, economical, and convenient. We of our own knowledge can say nothing upon the subject, but merely give the patentee's views and recommendations in reference to the manner in which he proposes to employ those materials for the production of heat.

Bituminous, oleaginous, resinous, waxy, or fatty substances, are to be employed: as coal tar, which is to be combined with water in certain proportions. It is proposed that a stream of coal tar shall be allowed to flow from a reservoir through a pipe with a stop-cock, and likewise a stream of water from another reservoir through a similar pipe; that the two streams shall meet, and fall into one general receiver with a funnel tube, by which they may be together delivered into the furnace.

The proportions are recommended to be one gallon of coal tar to one gallon and a half of water, the flow of the two liquors to be regulated by suitable apertures or stop-cock. These quantities of materials are to be slowly discharged from the funnels that the whole shall occupy from two to three hours in its delivery into the furnace; and where the furnace is of such magnitude as to require it, several of these funnel tubes may be employed, each delivering its supply of materials in the proportions and times stated.

It is not necessary to use water in a pure state, to be mixed with the coal tar, as foul water will answer the purpose equally well; and on ship-board, where the invention may be usefully applied to steam navigation, the bilge-water from below, or sea-water, may be pumped up and employed for the purpose, and on land the ammoniacal liquor from gas works will also suit as well as fresh water.—[London Journal.]

STEAMBOAT TRAVELLING.—The cabins of western steamboats present peculiar aspects. They possess all the splendor and comforts of an eastern boat, and afford other pleasures which we meet with no where else. A person embarking on a steamboat generally expects to remain on board for a longer time than is necessary to perform the trips elsewhere. He prepares himself for the formation of new acquaintances. The boat gets under way, and no one holds himself aloof from the advances of his fellow voyager. A feeling of general interest is soon acknowledged and felt. Intimacies are entered into, and each one contributes from his own resources to the general fund of amusement. By this means the hours are beguiled of their weariness, and that, which under other auspices would be tedious, becomes a source of pleasure.

But the most inveterate talkers will tire. Recourse must be had to other resources. If the voyager has been considerate, and supplied himself with those mute, yet ever interesting companions, agreeable books, he is at no loss. But if he have not prepared himself with a shield against the attacks of enemies he is in a pitiful condition. He lounges about the cabin—promenades the guards—gapes at the sublime scenery of the river hills—and eventually, in a fit of desperation, throws himself into his berth, and seeks in the oblivion of sleep, to forget that he is a bore to himself. Perhaps an ingenious companion who is similarly conquered by dullness, devises an expedient for relief. Gaming, we are sorry to say, is much too common; and no one must consider a proposition to have recourse to that dernier resort of dullness, as any other than a genteel proposition. A proposition is made that the tedium of the hours be lost in the excitement of the card-table. Such propositions are frequently acceded to.

Now, we believe many can date the commencement of their sinning in this way from a vacant hour of steamboat travelling. A taste for such excitements has thus been originated, which has eventuated in the moral degradation of its victims. If any expedients can be adopted to guard against such occurrences, they should be entered into by such as are desirous for the welfare of their fellows with alacrity.

An interesting book, by affording agreeable entertainment, would preserve the mind from the dreary inaction of lassitude. The sickly feeling of satiety is exceedingly propitious for the advances of vice. No man when under the influence of a healthy intellectual activity wishes for change. It is in those moments when that by which we are surrounded fails to yield us pleasure, that we sigh for change, and are most liable to listen to the voice of the tempter. The seductions of vice are yielded to, and inroads are made on our moral principles. The enemy once having got possession of our bulwarks, our condition is exceedingly precarious.

Under the weight of such considerations, we plainly discover the great utility of healthy excitement. If each steamboat possessed a small library of well selected works, a pleasant resource would be afforded. The expense would be but small. The advantages would be great. A steamboat with a library on board, would be preferred by every sensible man, to one which was unprovided with books. We commend the consideration of these suggestions to those engaged in fitting up steamboat cabins, and who are disposed to lessen the evils of humanity.—[Cincinnati Mirror.]

SHEET IRON GIGS.—These gigs are continuing to grow as rapidly numerous as they are increasing in public estimation. A very beautifully fitted up one was this week finished by Messrs. Reid and Hanna, and Messrs. Walker, for the Paisley Canal. Two others are in a state of great forwardness for Dublin; and several others, for various canals, are also in preparation. This business of gig making has extended to Johnstone, also, where there are six or seven of them getting forward for various canals both in Ireland and Scotland. Steam-coaches will find in these gigs most powerful competitors to contend with.

The increase of trade upon all the canals on which they have been introduced is quite astonishing. The bustle at the basin here and at Port Eglinton, by the hourly departure, is quite enlivening, and we understand the travelling by the Forth and Clyde Canal is increased in a most astonishing degree. Indeed, from the speed they have attained, and the low prices charged to Edinburgh, Stirling, Alloa, &c. no other result could be expected.—[Paisley Advertiser.]

MONTHS.—This division of the year appears to have been used before the flood;* and as it is naturally framed by the revolutions of the moon, the months of all nations were originally *lunar*, that is, from one new moon to another. In a more enlightened period, the revolutions of the moon were compared with those of the sun, and the limits of the months, as the component parts of a year, were fixed with greater precision. The Romans divided each month into *Calends*, *Nones*, and *Ides;* the *Calends* were the first day of the month, the *Nones* were the seventh, and the *Ides* the fifteenth of March, May, July, and October; in the other months the *Nones* fell on the fifth, and the *Ides* on the thirteenth. The days of each month, according to this form, were counted backwards; thus, the 18th of October was called *the 15th day before the Calends of November, &c.*. In the year 1793, the French Government had a new calendar constructed, in which they adopted the following fanciful designations for each month:

	French.	*Signification.*	*English.*
AUTUMN—			
1.	Vindemaire,	Vintage month, -	from Sept. 22
2.	Brumaire,	Foggy month, - -	Oct. 22
3.	Frimaire,	Frosty or sleety month,	Nov. 21
WINTER—			
4.	Nivose,	Snowy month, - -	Dec. 21
5.	Pluvoise,	Rainy month, - -	Jan. 20
6.	Ventose,	Windy month, - -	Feb. 19
SPRING—			
7.	Germinal,	Springing or budding mo.	Mar. 21
8.	Floreal,	Flowering month, -	April 20
9.	Prairial,	Hay harvest month, -	May 20
SUMMER—			
10.	Messidor,	Corn harvest month, -	June 19
11.	Thermidor,	Heat month, - -	July 19
12.	Fructidor,	Fruit month, - -	Aug. 19

This *new* calendar, which, after all, was only a plagiarism, or copy of one used in Holland from time immemorial, like many of the absurd institutions which sprang from the French Revolution, was laid aside in a few years, from the circumstance of its utter unfitness for the seasons, even as they occur in the several provinces of France itself; how much less applicable, therefore, must they have been to other countries, where the climates and seasons vary so much from each other! A calendar, to be worthy of universal adoption, must be capable of universal application. Not so that of the French *Philosophers*, which, independently of its discordance with those of all civil-

* Noah, as we find it recorded in the Bible, reckoned by months of thirty days each; and from him that mode of computing the year is supposed to have been adopted by the Chaldeans, Egyptians, and other Oriental nations.

ized nations, had not even the merit of indicating those very seasons from which it professed to derive its character. The late Mr. Grifford ridiculed this new-fangled method of registering time by the following ludicrous but happy translation of the republican months and seasons:

AUTUMN . . Wheezy, sneezy, freezy;
WINTER . . Slippy, drippy, nippy;
SPRING . . . Showery, flowery, bowery,
SUMMER . . Hoppy, croppy, poppy.

MACHINE FOR MAKING BRICKS.—Messrs. Harkness, Sawyer, and Freelove, have now in successful operation a machine which has excited the admiraton of all who have witnessed its operation. It produces twenty bricks in a minute, and these too, not the unshapely and rough masses of mud, which we usually call bricks, but a square and smooth body of clay, so hard, when they leave the press, that they are fit to set immediatly into the kiln for burning.

The moulds (four in number) in which they are pressed are made of polished steel plates—which plates are set in a cast iron box; and the whole banded with strong wrought iron bands. The machinery is so constructed that the mould is fixed in a solid stationary frame; and after the pressure is made upon the clay in the mould, the bottom of the mould rises, and throws the brick to the top, so that it may be conveniently taken off. It is found by experience, that not less than 50 tons pressure upon each brick will answer the purpose. This amount of pressure is, of course, wanted only at the very *last* moment of the impression; or, in other words, can be pressed with very little effort into a space within, say, one-fourth of an inch of the proper thickness. After it is thus far pressed, it then requires at least 50 tons to bring it to a proper degree of density. The machine in question is so constructed as to give this great pressure at the *time it is wanted*, and no other. In fact, it would be difficult to find, in all the mechanical operations now in use, a more perfect adaptation of the *means* to the *end*. And it is thought by many scientific gentlemen, who have examined the matter, that *no other* application of the mechanical powers will ever be made to effect the same object.

It is only necessary that the utility of this machine should be known, in order to introduce it into general use. The beauty and durability which it will impart to the brick buildings of the country must make it an object of great public interest. Add to this, the reduction of expense which must ultimately follow, and I cannot but regard the improvement of the gentlemen above named as of equal importance to any which has been introduced for the last 20 years.

The following *practical* statement, which has been obtained from the patentees, will no doubt interest such of your readers as are engaged, or may feel disposed to engage, in brick making.

A brick press can be put in operation for about $6.

The expense of carrying on the business for a month is as follows:

1st. 6 hands at $10 per month - -	$60,00
Boarding same at $1,25 per week, -	30,00
2d. 3 boys at $6 per month - -	18,00
3d. 2 horses at $15 per month, - -	15,00
4th. 60 cords of wood at 90 cts. per cord,	54,00
The setting and burning of 180,000 bricks, at 40 cts. per 1,000, - -	72,00
	$249,00

The above are the regular expenses per month of carrying on a horse power press. The press, when in operation, makes 20 bricks in a minute, or 9,600 in 8 hours. Deducting, however, for loss of time and other contingencies, 1-4th for every day's work, leaves the amount of 7,500 bricks per day, or 180,000 per month; which, at $3,50 per 1,000, are worth $630,00. Deduct the expense of making which is 249,00 and there remains a clear profit to the owner of $381,00, per month; or, $1,905,00 for 5 months, the time that could be conveniently occupied each season in brick making.

The above estimate is based upon the price of brick, of labor, and of boarding at Mount Vernon. In many places, labor and boarding would doubtless be more expensive. But in such places, the price of brick would probably be increased in proportion.—X. Y. Mount Vernon, May 15, 1834.—[Ohio State Journal.]

AMERICAN TONNAGE.—From the Report of the Secretary of the Treasury recently made to Congress, the Registered, Enrolled, and Licensed Tonnage of the United States amounts to 1,439,450 21.95 tons, divided among the States and Territories as follows:

	Tons.
Maine,	192,714 63-95ths
New-Hampshire,	17,126 54 "
Massachusetts,	395,924 23 "
Rhode-Island,	40,907 22 "
Connecticut,	52,878 79 "
Vermont,	1,531 4 "
New-York,	319,209 80 "
New-Jersey,	33,143 53 "
Pennsylvania,	88,162 11 "
Delaware,	13,265 64 "
Maryland,	80,705 70 "
District of Columbia,	17,225 3 "
Virginia,	43,877 55 "
North Carolina,	32,142 17 "
South Carolina,	15,560 75 "
Georgia,	8,651 45 "
Ohio,	9,683 72 "
Tennessee,	3,047 1 "
Michigan,	1,753 74 "
Alabama,	7,210 31 "
Mississippi,	925 43 "
Louisiana,	61,171 73 "
Florida,	1,911 28 "
Key West,	1,091 72 "

It will be seen that New-England owns nearly one half of the whole tonnage of the country. Massachusetts owns more than one-quarter, and has the largest amount of tonnage of any State in the Union, having upwards of twenty-six thousand tons more than the State of New-York.

We give from the same Report a view of the tonnage for each year from 1815 to 1832 inclusive. It will be seen that from 1828, the date of the Tariff law, to 1830, there was a very extraordinary falling off of the shipping interest; and that in 1831 and 1832, after the opening of the West India Trade, and the settling of the tariff question, there has been a gradual increase.

	Tons.
1815,	1,368,127 78-95ths
1816,	1,372,218 53 "
1817,	1,399,911 41 "
1818,	1,225,184 20 "
1819,	1,260,751 61 "
1820,	1,280,166 24 "
1821,	2,298,958 70 "
1822,	1,324,699 17 "
1823,	1,335,565 68 "
1824,	1,389,163 2 "
1825,	1,423,111 77 "
1826,	1,534,190 83 "
1827,	1,620,607 78 "
1828,	1,741,391 87 "
1829,	1,260,977 81 "
1830,	1,181,776 43 "
1831,	1,267,846 29 "
1832,	1,439,450 21 "

[Boston Post.]

TEXAS—*Brazoria*.—This town is located upon a wooden elevation of peach-land, as it is termed. The spot was chosen as the most commanding and healthful, besides commanding other advantages. One street stretches along the river Brazos, and one parallel with it further back, while other streets, with trees still standing, are laid out to intersect these at right angles, to be cleared as the wants of the citizens may hereafter require. A speedy settlement is calculated upon with perfect certainty. The first tree was cut in the year 1828, and the town now contains several hundred inhabitants. Such is the increase of population, that some families are obliged to camp out, for want of better accommodations. Mrs. Holley, in her interesting "Letters" from Texas, written two years since, says there is a great want of mechanics, none being there except carpenters. The town is thirty miles from the mouth of the river above mentioned. It contains a good boarding house, the proprietors of which are from New-York. A gentleman, graduated at Yale College, has opened a school, in which the higher branches of education are taught.

Honey Tree.—By these is meant hollow trees, in which the bees deposite their honey. They are very abundant, and honey of an excellent quality, and in any quantity, may be obtained from them. The employment is very profitable. The wax thus obtained is a valuable article of commerce in Mexico. The hunters frequently throw aside the honey, and save only the wax.

Texas is divided into three distinct tracts—the level, the undulating, the mountainous or hilly. The whole coast is level, but free from marsh. A belt of prairie, about ten miles wide, extends along the coast. Back from the prairie the land is heavily timbered with pine, ash, cedar, cypress, and other forest trees. The alluvial bottom lands of the Brazos, San Bernard, and Colorado, are from three to twenty miles wide. They are heavily timbered with various kinds of oaks, cedar, pecan, elm, mulberry, and other forest trees common in the alluvions of the Mississippi.

There is an immense cane-brake, as it is termed, extending along the Cane-brake creek seventy-five miles, and in width is from one to three miles. The Colorado and Brazos rivers, which were swollen by the spring and autumnal freshets, are of a deep red and very turbid. Three thousand pounds of seed cotton and seventy-five bushels of Indian corn are an average crop on the alluvions, which are easily cultivated. One of the branches of the Brazos river is salt, and the land bordering on this river has a fertility (owing to this circumstance) which is truly extraordinary. The alternate deposites of the salt and fresh branches form a soil of a light reddish brown color, impregnated with salt and nitre. The whole valley of the Brazos is what is called mulatto soil, and is the best in Texas. The earth, when brought up to the surface from a depth of twenty feet, will yield as good crops as the surface itself.

Ten miles from the town of Bolivar there is a tree which measures 19 feet in circumference. The country between the rivers and creeks is open, level, rich, and elevated prairie, colored with luxuriant grass, and nothing can surpass these vast natural meadows. Even in the winter season, the pasturage is sufficient to dispense with feeding live stock. On many accounts the prairies are deemed more valuable than the alluvial bottoms for cultivation. The soil of the prairies is a deep black mould, mixed with sand in various proportions.

Of the settlements, besides Brazoria, a town has been laid off at the mouth of the Colorado, called Matagorda, and is destined to become the depot of the Colorado, and of an extensive fertile country.

Above the level region, the country becomes undulating. This kind of land extends in a northerly direction up the Colorado, Brazos, and Guadaloupe rivers, from 150 to 200 miles above the level region, and reaches to the mountain range of Texas. This undulating section is deemed as desirable a residence for man as can be found on the face of the earth. It is bountifully watered, abounding in bold rivulets and springs of the purest water. Successful experiments have been made on these undulations, of wheat, rye, oats, flax, &c. Lime stone and building stone in abundance. Indigenous grapes of various sorts grow in great profusion, and natural vineyards await the hand of the vine dresser.

Attempt to assign the Cause of the Spontaneous Combustion of Charcoal. By Mr. JOHN DAVIES, Member of the Wernerian Society of Edinburgh, &c. and Lecturer on Chemistry, &c.

In the above interesting paper, no attempt has been made by the author of it to furnish an explanation of the phenomenon which he has established and described; and as every inquiring mind will direct its attention to a rationale of the operation, I presume that some remarks which have occurred to me within the few last days, and which may at least supply some aid in the discussion, may be without impropriety appended to the paper. These remarks, though theoretical, are countenanced by experimental analogies, which, if they fail to establish the accuracy of the speculation, may, at least, excuse its introduction.

A statement of the mode in which the charcoal in question is made, will be necessary in the subsequent explanation. Small fragments of wood, generally stripped of their bark, are put into iron cylinders, and exposed to intense heat, in order to effect the distillation of the volatile constituents for the manufacture of iron liquor. Now, Mr. Brunner resorted to a similar procedure in obtaining potassium from potash and charcoal; and as we know that potash may be procured from the wood employed by Mr. Hadfield, we have in his manufacture the same operation and the same materials as in M. Brunner's experiment, and may therefore expect the same results. The only difference would be, that as M. Brunner used much potash, he procured a large proportion of the metallic base; while in the other case the potassium must be in small quantity, because all the potash present would be only that supplied by the wood subjected to distillation: and yet, upon the whole, the quantity extracted under the latter circumstances is not inconsiderable; for it is by the combustion of such wood in America, where it is of comparatively little value, that the potash is principally formed which is consumed in the arts and manufactures in every part of Europe.

It is manifest, therefore, that in the formation of Mr. Hadfield's charcoal, potassium must, in small quantities, be liberated.

Supposing the presence of potassium in fresh charcoal to have been established, we have now to explain its operation; and this appears to be effected upon the assumption that the metal lingers in the pores of the charcoal, incased, as it were, in the substance, until it be at length exposed to the action of atmospheric air and aqueous vapor. This view of the subject derives plausibility from the facts, that the combustion does not commence at any considerable depth below the surface; and that when a thermometer is introduced into the mass, the ignition generally originates in that place; that is to say, the combustion occurs exactly where it might be expected, since it takes place at the part which, favorably situated, is most exposed to the action of the supporter of combustion.

This general view of the spontaneous combustion is directly countenanced by the excellent paper of Colonel Aubert, inserted in the "Bulletin des Sciences Militaires" for January, which Mr. Hadfield has offered me the opportunity of consulting. This ingenious foreigner shows by a number of decisive experiments, that the absorption of air and moisture is indispensable in the production of the phenomenon. He proves also, (what Mr. Hadfield has in a different way very clearly confirmed,) that no carbonic acid is formed before the incandescence occurs—a fact strictly in accordance with the hypothesis which I have offered; since upon this hypothesis the oxygen of the air, instead of forming an acid with the carbon, produces, by its superior affinity, an alkali with the potassium. The next position which he establishes, is that the carbon increased in weight in proportion to the quantity of air and moisture absorbed; and this should, according to the explanation suggested, occur, the alkali formed being much heavier than its metallic base. It appears that, to produce the ignition, the charcoal should not only be reduced to powder soon after its formation, but that the sooner it is so reduced the more certain and considerable will be the effect. Now, this fact also is entirely consistent with the explanation, because, when the pulverization has been delayed, air and moisture will have gradually produced the alkali, by a process imperceptible, because the minute portions of potassium would be at comparatively distant intervals from each other, and thus would not be in sufficient quantity at any one place to produce a sensible effect.

Colonel Aubert pulverized a mixture of coal and sulphur, and he found that under these circumstances no ignition ever occurred. The reason is obvious: for the potassium, which has been conceived to be the cause of the combustion, entered during the trituration into combination with the sulphur.

He also triturated charcoal with nitre, and he again found that the spontaneous combustion was prevented. Now nitre, by mingling with the potassium, would check its too rapid absorption of oxygen; and the effect of his experiment is in this way sufficiently accounted for.

The presence of the potassium seems to account for the circumstance, that when charcoal is moistened and subjected to heat, carburetted hydrogen is set at liberty. In this instance it would appear that the water is decomposed, the hydrogen evolved, and the oxygen united with the potassium to form the alkali. If the heat be continued, carbonic oxide would be evolved; the oxygen absorbed in the first part of the operation being again detached from the metallic base. Now this explanation corresponds precisely, I believe, with the order in which, in such an experiment, these gases are produced.

All these circumstances observed by Mr. Hadfield and Colonel Aubert appear, therefore, perfectly reconcilable with the supposition that the spontaneous incandescence is owing entirely to the oxidation of the potassium liberated from the wood during the manufacture of the charcoal.

Dr. Thompson, in the second volume of his History of Chemistry, published since my paper was read to our society, has thrown additional plausibility upon my explanation, by his attempt to show that phosphorus owes its property of catching fire, when in contact with oxygen, to a little potassium, which is reduced to the metallic state during the formation of the phosphorus.—[Phil. Mag.]

STEREOTYPE METALAGRAPHIC PRINTING.—*By Dr. Alexander Jones, of Mobile, Alabama.*—I offer this name, as I have nothing better to designate it. It means simply the transferring of printed letters, from the pages of a book, or newspaper, to the polished surfaces of metallic plates, especially of soft iron. My experiments are not yet completed, yet I feel satisfied that the result is entirely a practicable one, if carefully conducted with proper instruments.

The best plan on which to conduct the experiment is as follows: Take two plates of very soft iron, of moderate dimensions, give one face of each a very true and fine polish, so that, when applied by these faces, they shall uniformly fit and adhere together. Moisten two slips of printed newspaper, or parts of a leaf from a book, of the size of the plates, apply one to the polished face of each plate, and interpose between them a fold or two of silk paper, and then clamp the plates together. Give them a gentle heat over the fire, then place them in a vice, and apply a strong screw power. On separating them and gently removing the paper, the letters will be seen, distinctly formed on the faces of the two plates. Now, as printer's ink is formed of *lamp-black and oil*, upon which acid acts very little, the faces of the plates may be slightly touched over with diluted sulphuric or nitric acid, which, if skilfully applied, acts on the iron, and leaves the letters raised. When the printer's ink contains some bees-wax, the experiment is more complete. These plates, once formed, may be converted into steel, on the plan of Mr. Perkins; after which they would probably print from 10,000 to 20,000 copies without being materially defaced. An expert mechanic, with proper machinery, could in a day or two form a sufficient number of plates to print off 20,000 copies (500 pages) of an octavo volume.

Other metals, as copper, brass, and type metal, with slight variations, can all have letters transferred to them in the same manner, and can be used as printing plates; but none of these will have the durability of iron. —[American Journal of Science.]

Correct Fusing Points of Metals and Alloys, and other important Temperatures, upon various Thermometrical Scales. [From the Repertory of Arts, &c.]

In the thirteenth edition of Parkes' Chemical Catechism, edited by Mr. Brayley, jun., which has just appeared, we find a "Table of the Effects of Heat," (p. 606), in which the higher temperatures have been corrected by the editor, agreeably to the pyrometrical researches of Mr. Daniell and other chemists. As we do not remember to have seen any connected view of the results, as to the correct fusing points of metals and alloys, &c., which Mr. Daniell has obtained by the use of his new register pyrometer, we subjoin an extract from this table, containing the temperatures from 212° upwards. It may be requisite to state, for the information of such of our readers as may not be acquainted with the present state of pyrometry, that Mr. Daniell has shown (as we find it explained by Mr. Brayley at p. 70, *notes*, of the Chemical Catechism,) that "the degrees (above the zero of 1077° Fahrenheit, which is stated to be a red heat visible in the daylight,) of Wedgwood's pyrometer, instead of being equal to 130° of Fahrenheit, as supposed by its inventor, are equal only to about 20°;" and that consequently the *range* of that instrument, instead of including 3200 degrees of Fahrenheit, did not really include more than about 5000°: this will account for the great difference of the corresponding temperatures of Fahrenheit, &c., and Wedgwood, as here stated from the new edition of the Chemical Catechism, from those given in former editions

of that work, and also in many other publications on chemical subjects.

Fusing Points, &c. on the scales of	Fahr.	Reau.	Cent.	Wedg.
Water boils, and "fusible metal" [$\frac{3}{16}$ bismuth, $\frac{5}{16}$ lead, $\frac{8}{16}$ tin, smelt]	212	80	100	
Sulphur melts . . .	216	89	111	
Nitrous acid boils . .	242	93	116	
Camphor melts . . .	288	114	142	
Sulphur burns slowly .	303	120	150	
Pewter melts, [lead $\frac{4}{5}$, tin $\frac{3}{29}$,]	403	165	206	
Tin melts	442	182	227	
Type metal melts, [lead 16 parts, antimony 1,]	507	211	264	
Sulphuric acid (sp. gr. 1·848) boils	590	248	310	
Lead melts	612	258	325	
Mercury boils . . .	662	280	350	
Zinc melts	773	329	412	
Iron bright red in the dark—hydrogen gas burns?	800	341	427	
—red in twilight . .	884	386	475	
—red heat in daylight	1272	551	700	
Enamel colors *burnt*, or *burnt-in*,* on porcelain, ...	1392	605	756	6
Bronze melts, [copper $\frac{3}{4}$, tin $\frac{1}{4}$,]	1446	629	786	
————, [copper $\frac{7}{8}$, tin $\frac{1}{8}$,]	1534	668	835	
Diamond burns? . .	1552	676	845	14
"Orange heat" (Prinsep)	1650	719	899	
Brass melts, [copper $\frac{1}{2}$, zinc $\frac{1}{2}$,]	1672	730	911	
————, [copper $\frac{3}{4}$, zinc $\frac{1}{4}$,]	1690	737	921	21
Bronze melts, [copper $\frac{15}{16}$, tin $\frac{1}{16}$,]	1750	794	955	
Silver melts	1873	818	1023	28
Copper melts	1996	860	1091	
Gold melts	2016	862	1102	
Delft-ware fired . . .	2072	967	1179	10
Cast iron melts . . .	2786	1224	1420	
Cream-colored stone-ware fired	2992	1316	1645	86
Temperature of the maximum of expansion of platinum, being nearly the highest degree of heat attainable in a laboratory wind-furnace, .	3280	1444	1805	
Flint glass furnace, greatest heat? . . .	3552	1253	1956	114
Soft iron melts, according to Clement and Desormes, but in all probability an estimate considerably above the truth, . .	3945	1406	2118	

Mr. Brayley observes, at the end of the table, "The still higher temperatures, derived from the experiments of Mr. Wedgwood, which were here given in former editions of the Chemical Catechism, are now omitted; a comparison of them with the results obtained by Mr. Daniell, by means of his pyrometer, having shown that they cannot be relied upon. Some of the temperatures given in this Table above that of ignition, or 800°, must also be regarded as doubtful, and all of them must be regarded as approximative merely.

*This is a technical term used by enamellers, glass and porcelain painters, &c., to denote the fixing of the colors they employ, by means of vitrifaction, on the substances painted upon.

ANCIENT MARKS ON PAPER.—Every one knows how often we are obliged to refer to ancient times to explain common terms of art, and words which are in every one's mouth. We have a curious instance of this in the names which are given to the different sorts and sizes of paper. We all talk of *foolscap-paper*, *post-paper*, and *note-paper*; and paper-makers and stationers have other terms of the same kind, as *hand-paper*, *pot-paper*, &c. Now, the term note-paper is clear enough, as it evidently means paper of the size fit for notes; while *post-paper*, we may suppose, means the larger size, which is used for letters sent by the post. But when we come to *foolscap* paper, we are altogether at a loss for an explanation; and here we find we must look to something else than the size of the paper as to the origin of the name. Now, if we go back to the early history of paper-making, we find that terms which now puzzle us so much may easily be explained by the various paper *marks* which have been used at different times. In ancient times, we know, when very few people could read, pictures of every kind were very much in use where writing would now be employed; every shop had a sign, as well as every public house; and these signs were not then, as they very often are now, only printed on a board; they were always either painted pictures, as many inn signs still are, or else models of the thing which the sign expressed, as we still sometimes see a bee-hive, a tea-canister, or a doll. For the same reason, printers had always some device which they put upon the title pages, and at the end of their books; and paper-makers used marks to distinguish the paper of their manufacture from that of others. Some of these marks becoming common, naturally gave their name to different sorts of paper; and as names, we all know, remain very long after the origin of them is forgotten, and the circumstances changed, we shall not be surprised to find the old names still in use, though perhaps in some cases they are not applied to the same things they originally denoted. It will be the best way, perhaps, to mention briefly the chief paper marks which have been used, as they occur in the order of time. The first paper-maker in England is supposed to have been John Tate, who is said to have had a mill at Hertford; his device was a star of five points within a double circle. The first book printed on paper manufactured in England was a Latin one, entitled *Bartholomeus de Proprietatibus Rerum*. It was printed in 1495 or 1496. The paper seems to have been made by John Tate, the younger, and had the mark of a wheel. The paper used by Caxton, and other early printers, had a great variety of marks, of which the chief are the ox-head and star, the letter P, the shears, the hand and star, a collared dog's head, with a trefoil over it, a crown, a shield, with something like a bend upon it, &c. The ox-head, sometimes with a star or flower over it, is the mark of the paper on which Faust printed some of his early books; but the open hand, which was likewise a very ancient mark, remained longer in fashion, and probably gave the name to what is still called *hand-paper*. Another very favorite paper mark, at a somewhat later period, was the jug or pot, which seems to have been the origin of the term *pot-paper*. It is sometimes found plain, but oftener bears the initials or first letters of the maker's name; hence there is a very great variety of figures, every paper maker having a somewhat different mark. The hand and pot marks existed from 1539 to 1639, as may be seen in old Bibles. The foolscap was a later device, and does not seem to have been nearly of so long continuance as the former. It has given place to the figure of Britannia, or that of a lion rampant, supporting the cap of liberty on a pole; the name, however, has continued, and we still denominate paper of a particular size by the title of foolscap paper. The figures have the cap and bells which we so often read of in old plays and histories, as the particular dress of the fools, who formerly formed a part of every great man's establishment. Post-paper seems to have derived its name from the post-horn, which was at one time its distinguishing mark. This is of later date, and does not seem to have been used before the establishment of the General Post-Office, when it became the custom to blow a horn. This mark dates from 1670 to 1679. The mark is still sometimes used; but the same change which has so much diminished the number of painted signs in the streets of our towns and cities, has nearly made paper marks a matter of antiquarian curiosity, the maker's name being now generally used.—[Saturday Magazine, No. 11.]

CARRIAGES.—Wheel carriages for pleasure are generally supposed to have first come into use in England in the reign of Queen Elizabeth. But long before that time carriages of some sort were used on state occasions, or for the conveyance of sick persons. Even in the time of the Saxons, a clumsy kind of car, on four wheels, was employed to carry great personages; and Stow tells us, that, during Wat Tyler's insurrection in 1380, Richard the Second, "being threatened by the rebels of Kent, rode from the tower of London to the Miles End, and with him his mother, because he was sick and weak, in a *whirlicote*," which is supposed to have been a sort of covered carriage. "Chariots covered, with ladies therein," followed the litter in which Queen Catherine was carried to her coronation with Henry the Eighth. But Queen Elizabeth's is the first that was called a *coach*. In 1564 William Booner, a Dutchman, became the Queen's coachman, and about this time coaches were brought into general use in England. In 1588 Queen Elizabeth went from Somerset House to Paul Cross, to return thanks on the destruction of the Spanish Armada, in a coach presented to her by Henry, Earl of Arundel. These coaches must have been clumsy uncomfortable machines. They had no springs, and the state of the streets and roads must have made travelling in them any thing but easy. But fashion brought them into such general use, that in 1607 Dekker complains that "the wife of every citizen must be jolted now." And in 1636 there were 6000 of them kept in London and the neighborhood. At first they had only two horses, but afterwards the number was increased. In the reign of James the First, "the stout old Earl of Northumberland, when he was got loose, hearing that the great favorite Buckingham was drawn about with a coach and six horses, thought he might very well have eight in his coach, with which he rode through the city of London to the vulgar talk and admiration." In general, however, it was thought disgraceful in those times for the male sex to ride in coaches. "In Sir Philip Sydney's time, so famous for men at arms, it was then," says Aubrey, "held as great a disgrace for a young gentleman to be seen riding in the streets in a coach, as it would now for such a one to be seen in the streets with a petticoat and waistcoat, so much is the fashion

of the times altered." Sir Walter Scott says, it is a tradition in Scotland, that chaises or chariots were first introduced into that country in 1745. Before that time the nobility were accustomed to travel in vehicles somewhat resembling Noah's ark, and the gentry on horseback; but in that memorable year, the Prince of Hesse appeared in a carriage of this description, "to the admiration of all Scotchmen, who regarded it as a coach cut in half." When we compare the clumsy things in which even our kings formerly rode, with the convenient and light carriages of the present day, we cannot help admiring the progress which our workmen have made in this and every other branch of art, and hoping that their skill may always find that encouragement which it so well deserves.—[From a paper in the Archæologia, by J. H. Markland, Esq.]

AGRICULTURE, &c.

Use of Marl.—A correspondent of the Baltimore Farmer and Gardener thus speaks in favor of this manure:

I have been favored with the use of this mineral, as a manure, for more than twenty years, in neighboring states; and have, in many instances, witnessed the most wonderful improvement from its application. There is a great variety in the composition of this article; all of which require a corresponding difference in the component parts of the soil to which it is to be applied, for profitable results. He who goes to work with this manure without a knowledge of the composition of either his soil or his marl, will but flounder in an uncertain ocean of wild "experiment," and in many instances may expect to lose both his labor and his "deposites."

In New-Jersey there are three principal strata of this substance, differing materially in their composition, and in their adaptation for particular soils. The first stratum lies near the Delaware, is met with along the banks of creeks, and in the bottoms of wells—in one instance within my knowledge, it was penetrated nearly one hundred feet; but without going through the layer. This abounds with a large proportion of shells, and other fossil remains. The second stratum, farther up the country, has fewer shells, of a black color, and is granulated, by reason of which it has obtained the name of gunpowder marl. The third stratum lies still farther up the streams, and bordering on the regions of pines—this species strongly impregnated with sulphurous acid; so much so, in some instances, as to corrugate, and even excoriate, the cuticle on the hands of the laborers in the pit—has no undecomposed shells, color black, green, and sometimes blue, which has been used as a pigment for painting. I was acquainted with one tract of land which abounded with this latter species of marl, and was rendered almost entirely barren. With the exception of here and there a scrubby white oak, the soil was almost as bare as the beaten pathway. It had not been thought to be worth the expense of an inclosure, until it fell into the hands of a gentleman who understood something of the science, as well as the art of agriculture, and knew how to appreciate the value of a retort in the hands of a ploughman. On discovering the composition of his sterile soil, he knew how to apply the appropriate remedy, and after inclosing a lot, it was ploughed deeply, dressed with a coat of the hydrate of lime, and laid down to clover; and a finer crop of that valuable grass I never witnessed. Here the uncombined acid of the soil, uniting with the calcareous matter, formed the sulphate of lime, or plaster of Paris, which enters largely into the composition of clover, and forms its proper nourishment.

At this cheap rate, was this barren waste converted into a rich and beautiful meadow; not exceeded in value by any bottom meadow within my knowledge.

Had marl of the first mentioned species been applied to this land, it would have produced the same effect, in proportion to the quantity of undecomposed calcareous matter which it contained. The second species would have produced little or no effect; but had the last mentioned kind been used, it would have been like adding fuel to the flame, and would have rendered the sterility more lasting and obstinate. It was refreshing to witness the effect of this blooming spot, surrounded by the dreary waste. It could only be compared to the effect on the famished caravan, when, traversing the blowing sands of Arabia, he descries in the horizon the lonely palm tree, marking the site of a solitary spring of water.

Preparation of Beet Sugar. By Dr. F. Wurdemann. Being an extract of a letter from Dr. Wurdemann, of this city, now in Paris, to Dr. Ravenel, and communicated by him for publication in the Southern Agriculturist.

"Paris, December, 1833.

"The beets are collected when ripe, or little before that time, and immediately brought to the cleaning machine. This consists of a cylinder composed of rills of wood, and revolving in a trough filled with water; into this cylinder, the beets with their tops, as torn from the ground, are put, and thoroughly washed; one objection to cutting off the tops before washing, is that a quantity of saccharine matter escapes. They are then brought to the rasping machine, which breaks down their cellules, and reduces them to fine pulp. In some places the beets are brought dried to the manufactory. They should then be cut in tranverse slices, and dried in a stove heated somewhat below the temperature of boiling water, that being sufficient to destroy the principles of organic life in the beet, and which militates against the action of affinity present in all inorganic substances. The temperature should be below 112 degrees of Fahrenheit, as it appears that at that point the coloring matter is formed readily, either from a re-action taking place between the principles contained in the beet, or during the maceration, from the water used in that process. For the same reasons the time and degree of heat used in maceration should not exceed that requisite to extract the saccharine matter.

The quantity of fibrous matter contained in the beet is so small, in proportion to the liquid, and the cellules containing the latter are so minute, that it requires a most complete rasping to prepare them for the press. The presses most esteemed are those which press but a small quantity at a time, and that with expedition; as by these means most juice is obtained from the pulp. They are of two kinds, the screw and the hydraulic; but the limits of this paper will not permit me to give you a description of either; suffice it to say, that the pulp, having been placed in strong, closely woven cloth, is submitted to these presses, and the juice flows immediately into cauldrons, (coppers,) in which it undergoes the process of defecation. From good beets Dombasle obtains 85 per cent. of juice; from good and indifferent, 60 per cent. is usually got. From boiling them and then cutting them in slices, over which a current of water flows successively, he has obtained 90 per cent.; 60 lbs. of juice of good white beets yield from 4½ lbs. to 5 lbs. of raw sugar; those grown in rich wet soils give less.

The juice thus, or otherwise obtained, is subject to a spontaneous alteration, which is important to know. If exposed to the atmosphere, it gradually acquires a stringy and oil-like consistence, which, increasing in proportion to the evaporation of the liquid, at last resembles that of the white of an egg. These changes take place in less than twenty-four hours, when the temperature is at 20 degrees to 24 degrees *centigrades*. The mass which before this change never showed any free acid, now contains both *acetic* and *nanceique* acids, (the latter described by Braconnet in 1813—*Annales des Chimie.*) It is supposed that this alteration takes place in the beet itself when kept in too large heaps, and thus subjected to too high a temperature. It is the formation of this viscous matter which presents a great obstacle to the crystallization of the sugar, and which, gluing together the crystals, prevents the molasses escaping. To guard against this alteration of the juice, the utensils used in keeping and stirring the beet juice should be kept scrupulously clean, and the greatest celerity possible should be used in all the necessary operations, from the grinding to the defecation. The instruments of wood must be frequently washed with the greatest care, and when laid aside, should be covered with milk of lime, and which should not be removed before their immediate use is required. One of the best means to prevent this alteration in the beet juice is to employ small coppers, capable of containing about two hectolitres (two hundred English quarts) each; five of this size are capable to serve for the fabrication of 30,000 lbs. of beet juice per diem. Although the heat may be applied to a large copper long before it is filled from the juice flowing from the presses, too much time passes before it is full, and arises at the temperature of 70 or 80 degrees centigrades, at which temperature the juice may be considered safe from the alteration above mentioned.

I will not dwell on the *modus operandi* of the substances used in the defecation of the juice, but proceed, at once, to state the process most generally adopted. The quantity of lime varies from 2½ to 3½ "*grammes*" for each "*litre*" (quart) of the juice. As a general rule, the quantity must be increased in proportion to the quantity of saccharine matter contained in the juice. The purest lime should be used, and in its greatest degree of causticity, and it should be reduced into a clear pap by means of a little water before put into the coppers. It is best to put it in the copper as soon as a few buckets full of juice have flowed in, it acting in preventing the decomposition already so much insisted on, which is apt to take place to a more or less great degree before the juice arrives at the requisite degree of temperature.

Two methods are now used to complete the operation. One consists in preventing the boiling of the juice, by extinguishing the fire before it arrives at 100 degrees temperature, and then being left at rest for half an hour, when the scum rises to the surface; the liquid is afterwards drawn off by a cock placed near the bottom of the copper.

The method preferred by Dombasle is to continue the fire under the copper, and, when near the boiling point, watch the *first bubble* which swells under the scum; immediately take a ladle full of the juice from the spot where it arises, and pour on the spot a quart of cold juice, which checks the action immediately; the same operation must be repeated as often as a bubble appears, (which must never be permitted to burst and spread over the scum,) until, by examining the liquor taken up in the ladle, the defecation is found complete, when the fire must be extinguished, and the liquor allowed to rest for a half hour before drawn off; always guarding the bubbles, which may continue to rise, from bursting by the means already indicated. By this method, the operator is rendered com-

plete master of the work, and in those cases in which sufficient lime has not been used, he can have time to add more when he finds that complete defecation will not take place. For this purpose he has only to dilute a quantity of the milk of lime in the cold juice, which he pours into the copper. Even the introduction of the cold liquid alone sometimes produces a remarkable effect: a single quart changing the state of the liquor and causing the separation of the fæces in large flakes. The complete defecation is known by the liquid in the ladle being of a fine white wine color, and perfectly transparent, and that the fæces are divided into large flakes, which settle quickly to the bottom of the ladle. The liquor having been drawn off, the scum and residue are then placed on cloths extended over a table composed of wooden ribs, and having an elevated border; below this is placed an inclined plane, which conveys the juice into a reservoir containing the rest of the clarified juice. The cloths should be of cotton in preference to wool, which the lime, still retained by the fæces, is apt to rot.

Now, place the juice thus defecated into coppers destined to concentrate it. The form of the different coppers is not an unimportant object. Those used in defecation should be deep, viz. the depth half their diameter; and when bullocks' blood is employed in defecation, they should be as deep as wide. The coppers for concentration should be as wide as one foot in depth to four or five feet in diameter, those for cooking differ from these last only in having their bottoms three "*lignes*" in thickness at least. The combustible matter is pit-coal or wood, and the furnaces must be adapted to each. Animal charcoal is used in the concentration; that made from bones and not horns is employed. Its action is not confined to removing the color, but it acts also in an inexplicable manner, enabling the syrup to support a higher degree of temperature; and without it, it is almost impossible to cook the syrup on an open fire, which process will now be described.

Place the clarified juice into the concentrating coppers, and saturate the excess of lime, if it exist, by diluted sulphuric acid; it should not be rendered completely neuter, only so far that the purple (tournesol) paper changes slowly blue. Then pour in the animal charcoal in the proportion of 1½ lbs. to a "quintal" (100 lbs. weight) of the liquor. Boil and continue the concentration until the hot liquor supports (porte) 20 degrees *a l' areometre de Baume*. It is then withdrawn and left to deposit in deep wooden vessels, and kept in a cool place, where it precipitates during cooling a great quantity of calcareous salts, among which the malates are most abundant. When the syrup is perfectly clear, (at the end of twenty-four hours usually,) it may be submitted to the action of cooking (cuite.)

Being placed in the cooking coppers, carry it by a brisk fire to 32 degrees of *areometre* of *Baume*. Extinguish the fire, and throw in animal charcoal, in the proportion of ¾ lbs. to a quintal of the juice which has furnished the syrup, viz. half the quantity employed the first time. Let the syrup now cool to about 75 degrees, stirring it occasionally to mix the charcoal well with it; then carry it into the clarifying coppers, and submit it to the usual clarification of bullock's blood; it is then drawn off clear and the cooking proceeded with. The scum, &c. is placed on woollen cloths to drip. The preceding is considered the most difficult part of the process. The cooking coppers now receive it, and the point of concentration is told by touching the ladle dipt in the syrup and drawing out the thread. The thumb being below, when the finger is drawn from it, the thread should break at the thumb. The thermometers used for this purpose are rejected by M. Dombasle, as not to be relied on. When of the proper consistency, it is poured out into the "rafraichissoir," where it crystallizes.

The method recommended by Payer is to evaporate the *defecated* juice to twelve degrees of Beaume, without adding any animal charcoal; then draw off all the liquid into a filter filled with animal charcoal; evaporate *rapidly* the filtered liquid to twenty-five degrees of Beaume, and filter again through a filter of Dumont with fresh animal charcoal. The syrup is thus rendered ready for the cooking, it yields more crystals of a more beautiful hue, and the suppression of the bullock's blood no longer leaves a portion soluble and alterable. Payer recommends also the copper on a pivot for *cooking* the clarified juice, it (cooking) being in this accomplished in five or eight minutes, while the other method requires thirty or thirty-eight minutes; moreover, the alteration is six times less in syrup cooked in this than in the usual stationary coppers. The fire being brisk, the ebullition is commenced in one minute in every part of the copper; frequently the syrup is too viscous, and rises in a thick froth, and, incompletely wetting the bottom of the boiler, hazards the burning of the sugar; to check this instantaneously, throw in a small quantity of fresh butter, four or five *grammes*, which Dombasle recommends to have been previously melted, as that operation prevents the sugar receiving any flavor from it; as soon as the syrup, by means of the touch, is found cooked, draw the cord, and thus canting the copper, its contents pour out at once; open the stop cock, and proceed with the process; seven or eight products being thus united in the rafraichissoir, it is rolled into the rooms containing the forms, for much of the French beet sugar (raw) is in loaf form.

I have thus, my dear sir, given all the information I possess relative to the manufacture of beet sugar from the expression of the juice to the crystallization. I have drawn freely from the latest and most esteemed works, but as yet have not been in a refinery. I thank you for the hint, how I may render my stay here serviceable to my native city; and shall use my endeavors to gain admittance into a refinery before my return.

I am, with great regard, dear sir, yours, very respectully, F. WURDEMANN.

APPLES FOR OXEN.—Last season a widow lady residing in New-Jersey bought a pair of working oxen for $55. She had them fed on apples and grass, with the addition of four or five bushels of ears of corn. She sold them in the fall to the butcher for $94. The apples were the kinds of which the best Newark cider is made.

Report on the Cultivation of Turnips with Compost applied in a peculiar manner. By MR. HUGH MUNRO, Assynt by Evanton, Ross-shire.

[The following is from the Transactions of the Highland Society of Scotland, and the plan may be worthy of imitation in some instances.]

I had a field of nine acres, which I wished returned into grass, and from the little experience I have as a farmer of four years' standing, I considered that grass after turnip eaten off by sheep would be better than after any other course. I at one time thought I should be obliged to purchase bone-manure for this field, not having any fold manure; but the expense of bones for nine acres, at twenty-five bushels per acre, at 2s. 10d. (the price last season), would £3 10s. 10d., or £31 17s. 6d. I have, however, heard that fourteen bushels of bones per acre have been applied to raise turnip with success, which makes £1 19s. 8d. per acre, or £17 17s. for nine acres. So I determined to try and find a substitute that would be cheaper and equally effective, in which, I am happy to say, I have succeeded beyond my most sanguine expectations. I got some of the small tenantry to bring to me a quantity of peat-moss, for which I paid £2 10s. I then mixed all the chaff from the mill, the fire-ashes from my own house, together with the sweepings and fire ashes, &c. &c. of my servants' houses, (for which I gave straw to bed their pigs,) the scrapings of roads and ditches, and then wetted the whole with the superfluous urine from the fold, having added a little lime and horse dung, and turned it frequently till it was well pulverised; and in this way I prepared 45 single cart loads. During the winter, I drilled from the stubble the field intended for turnip, and let it lie exposed to the weather in that state until the end of May, when I harrowed it smooth, and then drilled it again by splitting the former drills. I then put a light roller over the drills to make it smooth, and commenced laying down the turnip in the following manner. I had five men with large dibbles made of hard wood, with which they made holes eight inches apart on the top of the drills, pressing down the dibble with the foot, each man having a single drill, followed by a woman with a basketful of the prepared manure,* and into each hole made by the dibble she placed a handful of manure. After her, followed a girl with a little bag of turnip seed†, putting from three to six or more grains on the top of the manure, with her fore finger and thumb, drawing a little earth over it; and in this manner I carried on five drills at a time with fifteen people, viz. a man and two women to each drill. The whole went on like clockwork, and I finished the nine acres in four days, at an expense of about £5, including purchase of peat moss. The turnips grew rapidly, and I had them cleaned in the usual manner, sometimes leaving two plants in one hole, which I found to answer well, especially if the plants happened to be a little distant from each other, say about two inches. I have thus raised an excellent crop of large turnip, by applying *only* five single cart-loads per acre of this prepared manure, and the expense of the whole does not exceed £5; indeed, they are so good, that I am now stripping one half previous to putting on the sheep. Every one who has seen the turnip has been surprised, and several in my neighborhood intend adopting the same plan next year. I shall now attempt to make some observations on this plan which I have adopted.

1st. Where the land is foul with weeds, the usual mode of cleaning should be adopted, and then drilling the land once.

2d. That the manure to be prepared should be made as strong as possible, by the surperfluous urine of the court-yard in winter; and that the scrapings of roads and ditches, with rubbish of old houses, &c., would be preferable to peat-moss. A boll of lime should also be mixed with every ten cart-loads, and, when well attended to, less than five cart-loads per acre will be found sufficient.

3d. I observe that, although the season may be dry, and the sides of the hole liable to fall in, yet, by making the women with the manure follow the dibble quickly, this inconvenience (and I may say it is the only one) will be obviated in a great measure; and where this was done, I found no difference in the crop of turnips.

4th. This plan can be followed in all kinds of weather, and *better while raining*, which is not the case in the usual method.

5th. Where five or more grains of the seed come up together, (forced on by the strength of the manure over which the seed is immediately placed,) they will force themselves through, even should the soil be barkened by rain, wind, and sunshine. And,

6th. Should dry weather be the character of the season while sowing the turnips, they will show a healthy braird, the manure, which is their food, being close at hand, and they not being obliged to push their delicate roots through a quantity of earth in search of nourishment, as in the method now in use.

* The manure is taken to the field in carts from where it is made, and the driver fills each woman's basket as they may require it.

† I only expended 2 lb. of turnip seed for each acre.

HAIL.—Hail fell in St. Francisville, La. on the 27th of March, and killed some sheep, chickens, &c. Some of the stones were as big as turkey's eggs.

CULTIVATION AND MANAGEMENT OF THE TOBACCO CROP.—Having an increasing number of subscribers in the southern states, we deem it due them to occupy a portion of our pages, even for their exclusive benefit.

To the Editor of the Farmer and Gardener.

SIR—To enable us to answer the numerous inquiries, which are constantly made relative to the cultivation of tobacco, we requested an extensive and highly intelligent planter (of whom we have received ten varieties of seed of the choicest Maryland sorts) to give us his views relative to the proper mode of cultivation and management.

We have the pleasure of enclosing his remarks on the subject. If you think them worthy a place in your valuable paper, publish them; the result may prove useful to your numerous subscribers. Respectfully, yours, SINCLAIR & MOORE.

Baltimore, May 20, 1834.

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The ground is prepared as you would for cabbage seed; in addition, it is always, when taken from new ground, burnt by placing a quantity of brush upon it, then set on fire, for the purpose of cleansing it from all filth. The repetition of burning may be avoided by always weeding up the bed after you are done with it for the season. The *quantity* of seed required is about a wine-glass full to ten yards square; but in this we differ in practice very much—we know if we could be certain it would always come, that this quantity would be enough; and as it is uncertain, we most always sow three times as much, with the calculation, should it be too thick, to rake out the over quantity. This raking is of rather a recent date, and is done by a small rake made of 10d. nails, put about five-eighths of an inch apart, with sharp points; and it is used with a little slight of hand, so as to divide the plants without leaving them in rows. This operation is performed when the plants are about the size of a five cent piece, which is usually in the early part of May, and just before we think of planting.

Planting is usually done from the latter part of May to the 10th of July; here again I must refer you to the mode of preparing and planting cabbages in hills. The *size* of the plants, about three inches broad, are the best size to plant out; when transplanted they are also cultivated very much as cabbages, only oftener worked with the plough and hoe.

Usually, in the middle of August, tobacco will signify its approach to ripening by buttoning and blossoming, at which time we quit working it, and proceed to break off the blossoms to such a leaf as we think will ripen as soon as the bottom leaf, (which we call topping tobacco); after this it will commonly put out suckers just above the joints of the leaves, these must be broken off, and then we think it time to house. *Cutting* and *housing:* This is done with a similar instrument to a butcher's cleaver. After it is cut it may lay for a little time, until the leaves fall and will not break by handling.

From the ground it may be taken in large loads to the tobacco house, where it is usually pegged (a wooden peg six inches long is driven into the butt, by which it is hung on the sticks in the house,) but sometimes split; this is done by a knife, splitting the stalk down nearly to the butt, before it is cut down in the field, and when brought to the house it is straddled across the sticks, instead of being hung on them by the peg. The sticks are placed on the bearers in the house about six inches apart, the plants put from four to six inches apart, according to the size, where it is cured either by fire or suffered to cure by the air. It is considered cured when the stem of the leaf is dry. *Stripping* comes next; for which we choose moist weather, the only time it can be handled without crumbling, and tie it in bundles, from which it is generally put in bulk and watched that it does not heat; after which the bundles are straddled across the sticks for *conditioning* to pack; here it must be noticed that the bundles get completely dry, and then as soon as moist weather again enables you to handle it, it must be taken down and put in large bulks and weighed; this is called *close bulks*, here it is ready for packing; that process is so generally known that I do not deem it necessary here to say any thing about it.

The kinds. Tobacco is esteemed mostly for two reasons, one for *quality*, the other for *quantity*. It is supposed the thinner jointed tobacco generally cures the brightest, but I do not entirely subscribe to this opinion, as I have often seen the thick jointed of as good color. Am inclined to think there is more in the soil than in the kinds; a poor hickory soil will produce a good color, when I have seen such black soil produce very dull tobacco; but as a general rule, give me the thick jointed sort, and upon tolerable strong loam. Rich stiff soil will not produce a bright crop, but will give a heavy crop; quite sandy soil, on the other hand, is likely to produce bright, but a light crop. So, upon the whole, I should prefer the thick jointed tobacco, and upon a loomy soil of pretty good strength, to produce the most profitable crop.

Tobacco is a very troublesome crop; it never being off hand. The seed of the new is sown before the old crop is packed and sent to market. It is subject to many enemies, among them the fly in the bed and in the field; when small, the ground worm, the bud worm, the web worm, and lastly, and most destructive, the horn worm; these come in immense quantities, and are similar to the Tamata worm. They will, from the eggs laid upon the leaves, grow in a few days as large nearly as your finger, and will, in a short time, leave nothing of the plants but the stems and stalk. These worms are the common enemy; they commence with the first growth of the tobacco, and at different periods follow it up until the crop goes to the house. *Our plan* of defence is to pick them off by hand, or use turkeys; they are best, because more expeditious. Turkeys, by driving them into the tobacco, will regularly examine each plant and pick them off.

I neglected in its place to say what time the seed should be sown—from February to the first of April is the best time; and the quantity raised per acre is generally one thousand pounds from 3,500 to 5,000 hills, according to the quantity of land.

PLOUGHING IN GREEN CROPS.—I have found by experience, that when a spring crop is taken off, and wheat is to follow, the best method is to harrow thoroughly, immediately, which causes all the seeds of grain which may have scattered, or of weeds, to vegetate. About two weeks before seeding, turn all the green stuff and stubble under the soil, there to remain and rot. If ploughed the second time, much of the stubble is brought to the surface and lost.—[Genesee Farmer.]

AN IMPROVED BEE HIVE.—The box or hive to be made of inch plank, say about two feet three inches by twelve inches wide; the upper part of the box to be partitioned off, allowing just space sufficient to admit a drawer of about ten by twelve inches deep. This drawer is to slide upon the horizontal partition, and to be made to fit the inside of the box exactly. In the bottom of the drawer a hole is to be made, say about one and a half inch in diameter, and a corresponding one in the partition, so as to allow the bees to pass up from the lower part of the hive into the drawer. In the outer side of the drawer, a pane of glass is to be fixed, in order to ascertain when the drawer is filled with honey. Over the glass, a sliding shutter is to be placed, to exclude the light; or the upper end of the plank, forming the back side of the box, or hive, may be sawed off, and fastened with a hinge and button, so as to answer in place of the sliding shutter. When the honey is wanted for use, remove the shutter from before the glass, and having ascertained that the drawer is filled, introduce a little smoke into the top of the drawer by means of a tobacco pipe; and when the bees have been driven into the lower part of the hive, separate the drawer and partition with a case knife, remove the drawer, and having emptied it, return it to its place again, and the bees will commence working in it immediately. By this method the honey will be always pure, without bee-bread, or dead bees, and not a single bee need be destroyed; and moreover, it has been tested by many years, trial, and found to answer the intention completely. Z.

P. S.—The drawer should have a top *screwed* on, so as to be more readily opened when the honey is to be taken out: and any space between the drawer and the sides, or top of the hive, should be filled with some kind of cement, so as to prevent insects from making a lodgment within the hive.

A CURIOUS HORTICULTURAL ANECDOTE.—When Sir Francis Carew had rebuilt his mansion house at Beddington in Surrey, he planted the garden with choice fruit trees. There he was twice visited by Queen Elizabeth; and Sir Hugh Platt, in his Garden of Eden, tells a curious anecdote relating to one of these visits. "I conclude," says he, "with a conceit of that delicate knight, Sir Francis Carew, who, for his better accomplishment of his royal entertainment of our late Queen Elizabeth, led her majesty to a cherry tree, whose fruit he had of purpose kept back from ripening at least one month after all cherries had taken their farewell of England. This secret he performed by straining a tent or cover of canvass over the whole tree, and wetting it now and then with a scoop, as the heat of the weather required; and so by withholding the sun-beams from reflecting upon the berries, they grew both great, and were very long before they had gotten their perfect cherry color; and when he was assured of her majesty's coming, he removed the tent, and a few sunny days brought them to their maturity."—[Platt's Garden of Eden.]

LEMON TREE.—In the green-house of the late Hon. T. Bigelow, of Medford, there is a lemon tree, which, besides its foliage, its buds, and flowers, has on it about three hundred lemons. These are of course of all sizes, from the smallest to the largest, which are sixteen inches in circumference. The tree is supposed to be about fifty years old. It was given to Mr. Bigelow by the lady of the late Hon. Wm. Gray, about twenty-five years ago. It is emphatically a perennial, being never without foliage, flowers, and fruit. Perhaps some of the credit of rearing and perfecting this splendid exotic may belong to the gardener, whose watchfulness and care have been applied to it during the whole time that it has been in its present place.—[Boston Courier.]

NEW-YORK AMERICAN.

JUNE 21—27, 1834.

Our table is so covered with books, that have accumulated there during the season of long documents, that it is almost impossible to turn one's pen around in hitting off a paragraph upon any of the prevailing subjects of interest. We are, in fact, suffering from a plethora of new publications, and without waiting for our usual weekly relief through the review, we must begin to practice a little daily depletion. Opening the first volume that comes in our way, we find it to be a collection of Aphorisms, from various authors, ancient and modern, embodied under the title of "The Moral Testament of Man," and neatly published by Key & Biddle, of Philadelphia, Without pausing a moment to examine the propriety of the title, as applied to a book made up of the sayings of Chesterfield and Rochefoucault, Byron, Bulwer, and others of the modern novelists, blended with the more orthodox good things of Johnson and Goldsmith, we will, as briefly as possible, say all we have to add by way of codicil to the Moral Testament. We never believed much in aphorisms, for great men say so much merely for effect, and say it at the same time so well, that they easily succeed in passing off sound for sense, and lead us to swallow antithesis for truth. An absurd instance of the kind occurs at this moment to us in the popular sayings of Lacon—(whose best things, by-the-by, are stolen from the Greek and the French Aphorists)—where he says that "Many a man has been canonized who ought to have been cannonaded." There is nothing as bad as this in "The Moral Testament,," though the author of Lacon is largely quoted. But the compiler should have omitted one of the following quotations from Bulwer, which to most apprehensions seem to nullify each other:

"To be pleased with one's self is the surest way of offending every one else."

"The great secrets of being courted are to shun others *and seem delighted with yourself*."

Such an oversight, however, may be readily forgiven in consideration of the following capital quotation from Lavater, which is new to us:

"Who in the same given time can produce more than another, has vigor; who can produce more and better, has talents; who can produce what none else can, has genius.

That is, that genius is an *inventive or creative faculty*: the power either of bringing new resources to light, or of combining old materials in forms hitherto undreampt of. This to us has always appeared the true and simple, the only definition of a term which sophomores and sages will never cease puzzling themselves about. Genius may be called a gift because it seizes those things by intuition, which talent arrives at by process of meditation.

The quotations from Chesterfield in this volume are generally well chosen, though he might have been quoted more largely to advantage. Whatever one may think of Chesterfield's morals, his system of manners has this advantage over most others, that it is founded upon philosophy, and would suit all peoples in every age. The more modern writers of the subject treat only of the conventional dicta of the circles which they profess to paint,—of fleeting fashions, which have nothing to do with the essentials of good breeding, and which, however important at Almack's, would never enable a man to pass muster as a gentleman among the Turks and Spaniards—and they, if Lord Byron, Mr. Slidell and Dr. Dekay are to be believed, are the most really polite people in the world.

The great difference between Lord Chesterfield's doctrine and the prevailing English tenets—as exemplified in the man of breeding of his day and the man of ton of ours—was that the first was always to study what was due to his neighbor, the last to be ever on the qui vive as to what is due to himself. The former was presumed to be so much of a gentleman in grained that he could not be affected by courteous intercourse with his inferiors. The latter seems to be held so precariously polished that the slightest contact with any object less soft and smooth than himself may brush the golden flour from his butterfly-wings, and subject him to a loss of caste. The Chesterfield gentleman was born of the world and meant to shine in it. He that superseded him come from a London parish, and is suited to no other atmosphere. The raw material of the first abounds in West Virginia and Kentucky; the last you may see in a manufactured state by stopping an hour at any of the steam boat landings along the Hudson, and observing the air with which it steps ashore among "the natives." They however, may be best studied by seeing each meet one of its kind. The former, when he encounters a brother, seems to know him by intuition, the latter always waits until certain masonic signs pass between him and the party he wishes to recognize. In this month, green peas are their ordinary medium of communication, and the mystic figures are made with a fork. It must be admitted, however, that the Exclusive has this advantage over the Chesterfieldian—he is never alone; the real man, and the affected character always making good company for each other. †

[For the New York American.]

Steamboat Native, Ohio River, June, 1834.

Oh you pampered New Yorkers, puffing and blowing in the heat and bustle and politics of your Babyloman phalanx, in the name of justice I entreat you send some *investigator* from the bevy of your unconfortable idlers, and see with your own eyes, and tell with your own tongues, and—let conviction rest upon it—that Nature hath exhausted neither wardrobe nor jewel case in the decking of your thrice immortalized North River.

I am floating on the tranquil Ohio—which is just now in one of its happiest moods, neither *hurrying* on with a phrenzied haste, and spilling its unwelcome riches upon the grain fields—nor yet low, turbid, and uninteresting, as the best bred rivers will sometimes find themselves in the languor and heat of summer. The wheel of the "Native" has dislocated an arm, and the momentary pause having called me from my lounge, I am overwhelmed with a richness of scenery that never met my eye before, and in the fullness of gratification, I do protest (since that is the fashion) against a monopoly of praise that hath almost swollen your Anthony's Nose with satisfaction. The beauty of the Hudson River scenery consists, if I am right, in dark, precipitous and frightful cliffs, huge projecting rocks, and battlement-like embankments, and that in the upper country, more particularly in mighty barren hills of a grotesque figure. It has much of the stupendous and sublime for every eye, and is of that wild and Alpine character that ambitious young men, and amateurs in the Arts, like to be thought to admire—such as honest lairds and yeomen's sons break their necks after in Switzerland. Here then is the difference. The Ohio, calm, placid, unruffled as a Christian, is all smiles and love. On its banks, on either side, honest labor has earned a peaceful home, and the proprietors (no swollen cits) have put up—in well selected positions, sometimes on a point projecting into the river, and sometimes at the foot of a gently rising hill—a shelter, after the rude fashion of the country, often adding a beauty to the aspect that his art never intended. Here is a field in the dark green mantle of wheat—on the other side, extending far up the hill—where the trees have been girdled and left for time to fell, their naked and leafless branches outstretched as if in the agony of a protracted fate—is the dark, rich looking soil where the Indian corn is struggling into existence. The bosom of the river is covered with a variety of boats, and just before us is one of that huge and cumbrous fashion, so long known on these waters, barely solicited into motion by the joint efforts of the current, and the sweeps and poles of the boatmen. These last are singing—with rather more vehemence than melody—and as the boisterous echo returns from the shore, it mingles with the happy laugh of some young adventurers, whose rickety shallop is dancing about in our wake. The immediate margin on either side, is fringed with hazel and beach, whose clustering foliage overhangs the water, bending with a grace—and you may trace the river wending far away, till the hills close in upon it, and all is lost and indistinct but the deep blue color, and the undulating outline against the sky. However, I do not desire to make a picture, and all I mean to say, is, that no man whose heart beats at beholding the independent and substantial comfort of a people, can view the Ohio scenery without feelings of satisfaction and gratitude that may fail to be aroused by the curious presentations of the Hudson.

I might say more, but we have a metaphysical Dutchman on board who is getting entirely too audible, and so, Adieu, H. S. E.

Our readers are indebted to H. S. E. for the foregoing animated invitation, and we sympathize fully with him in his lively admiration of the beautiful Ohio. But it was heretical in him to institute so close a comparison with the Hudson. He might as well compare Hebe with Juno, or rather the head of Antinous with that of the Apollo; Lalla Rooke with Childe Harold; or the delicate gazelle of the Indies with the antlered elk of our western prairies. No one will deny the far flowing river of the West, the exclusive title of *La Belle*, by which it ever will be distinguished above all rivers that seek the sea: no one at least that has seen the place of its birth in Pennsylvania, where Virginia and New York send two of their most beautiful streams to mingle and bear a united tribute to the father of rivers: or, after hurrying for days on the boiling and turbid current of his desolate waters, turned aside from their cheerless bosom, to glide over the transparent tide, and loiter by the arcadian banks of the beautiful Ohio.—But the Hudson—the lordly majestic Hudson—mingling so much grandeur with its beauty, and blending as many various charms together, as could be concentrated in its short passage to the sea—there is inour humble opinion on stream upon the continent that can in romantic beauty of the highest order compare with it. There is a part of the Hudson, however, but little known by its warmest admirers, which, after repeatedly visiting, we have found more attractive than those scenes which have elicited admiration from travellers in all parts of the world. It is the northwest branch of the River, where it ceases to be navigable, and wanders about through the most broken and picturesque country in the Union, to hide its head in a hundred beautiful lakes. He who glides over their lonely waters—for the banks of many of them are still as solitary as those of the wildest waters of the Far West—he who glides over their transparent bosoms, or moves along their mountain shores where in one place frowning cliffs will darken the silent tide, and in another a fringe of silver sand receive its undulations, while, where the primeval woods slope more gradually to the shore, the wild deer steps unfrightened from her green covert to stalk along the snowy strand—could almost predict the infinite beauty and grandeur, the boundless variety of attraction that the stream which derived its birth from such sources would bear with it on its course. †

[For the New York American.]

The Corner Stone.—A correspondent in one of your late numbers, inquires after the origin and meaning of laying the corner stone with invocation of the Divine blessing. As a religious rite, I apprehend its origin as Jewish, its application to type the coming Messiah, and would refer him to Isaiah, 28th chap. 16v. Solomon (himself a type) may have first introduced the custom in the building of the Temple, another type of the same glorious Person. In the New Testament scriptures, the same appellation is given to it; 1st Peter, 3d chap. 6, 8, where the Redeemer is styled the head of the corner; in Ephes. 2d chap. 20., the *Chief* Corner-stone. Builders of systems and temples have too often disallowed such a reference to the ceremony,—have too often considered Him a stone of stumbling and rock of offence; but to those that *look* for Him, He is precious, as is every type and shadow that applies to (either) his Divine character or Divine mission. May you and I, Messrs. Editors, build on this (His) foundation *alone*, not wood, hay and stubble, but gold, silver, precious stones.—]Rev. 21st ch. 1v.

Christians are the Temple of God, (Corin. 6th ch.

16v.) but it is *in* Christ alone, building *on* Him as the "Hope of Glory," and that the building is fitly framed (Eph. 2d ch. 21v.); for other foundation can *no man* lay than that is laid, Jesus Christ.—[1st Cor. 3d ch. 11v.] SCOTUS.

[FOR THE NEW YORK AMERICAN.]

A HINT TO TRAVELLERS.

Mr. Editor: As the warm season is approaching, and many persons are casting about to see when and where they may spend a few months in search of health, novelty, or amusement, or all united, perhaps a word of advice from an old stager may not be taken amiss by those who have had less experience.

I am a way-faring man; I am told that the bump of "locality" is mightily developed upon my pericranium; I delight in change. When wearied of the iron bound streets,—the piles of brick and mortar,—the heat and noise, and the endless, unvarying throng of the city, I love to rush into the open air, into the midst of fields and forests, and the neighborhood of the rushing waters.

And then, again, when I become tired of solitude and myself, I return with new zest to the presence of man and to the luxury of social life; and I find the pleasures to be found on either hand increased a thousand fold by the contrast.

The restless energies of our countrymen are daily opening new scenes, and offering new invitations to the tourist and traveller. The last one of these which I have visited "in search of the picturesque,' was afar "down-east—in the midst of the "rocky mountains" of New Hampshire.

It is a lake of a most unpronounceable and unspellable Indian name, called by the present natives, as near as I can reduce it to writing, WIN NE-PE-SAW-KEE. If you were to endeavor to pronounce it as it is written by geographers, (Winnipisseogee), the people thereabouts would not understand you.

It is a beautiful, but very irregular, sheet of water, some twenty-five miles in length, and of no particular breadth, as Davy Crockett would say; full of islands, having *exactly* 365, as they say of all lakes and bays when the number is large, and not easily ascertained: it resembles Lake George in the clearness of its waters, but is, I think, superior to that famous lake in the variety, and even boldness of its surrounding scenery. Those who like the authority of great names, may find in the steamboat's album (for they have a very pretty steamboat there) the recorded opinions of Dr. Kirkland, and I think, of President Adams also, that in beauty and sublimity, it equals all and surpasses also most of the show-scenes of Europe; and I understand that the Rev. Mr. Bigelow, whose published travels in Sicily and Great Britain prove him to be a good judge, says that "Loch-Lomond" and the other Scotch lakes are not to be compared with it.

The sublime, but bare and solemn scenery of the White Mountains is about sixty miles distant from the north end of the Lake; at which point, by the way, at a quiet little hamlet, is a very *nice* and well provided public house.

From the Notch of the White Mountains you can return home by "crossing the country" to Saratoga, or, in an infinitely more agreeable manner, by descending the beautiful valley of the Connecticut, to Hartford.

The better way of reaching this Lake, by those who are not pressed for time, is to go to Portsmouth, where you will find a most elegant Hotel, kept in what I understand was the mansion house of the late Governor Langdon; 'tis called the Rockingham House, and in the minutiæ, as well as the essentials, is equal, in my humble opinion, to any of the "crack" houses of the day. DR. SYNTAX.

P. S. If you mean to fish for the salmon, trout, perch, and pickerel of the Lake, or the inimitably fine brook-trout of the mountain streams of New Hampshire, you had better take your fishing-gear with you. Every thing of that sort in the granite State, like their politics, is execrable. S.

[*From the New Orleans News.*]

LATEST FROM MEXICO.—By an arrival yesterday, we had Tampico papers of the 2nd June, from which some translations have been make.

MEXICO, MAY 18.—We are assured that the supreme government as just received intelligence by express that the city of Jalapa has opposed its civil authorities, and made the same declaration against the government that the towns of Orizava and Cordova had just done before.

MAY 21.—We have seen several letters from Puebla, stating that on the night of the 17th inst a band of about 200 armed men seized on the convents of St. Domingo and St. Augustin, loudly demanding the deposition of the actual government of the city and state, and making the same proclamation in favor of religion and the church, that was done at Orizava and Cordova.

Last Monday, Senor Gonzales Angulo left here for Puebla, as a commissioner on the part of the general government, but the nature of his instructions has not transpired.

Yesterday, Colonel Gonzales Pavon, at the head of 200 cavalry, left this for Puebla. The prudence of this officer, and the instruction he has received to act with moderation, lead us to hope that the spirit of hostility in this city will soon cease.

Note by the Translator.—From the complexion of a political essay in one of the Mexican papers, it would seem that about a month ago, the President, Santa Anna, had evinced some hesitation concerning the line of policy he would pursue in future, that is, whether he would join the party of the clergy or that of the reformers. We regret to add, that letters from Vera Cruz state, that Gen. Santa Anna had joined the cause of the priests, and, with part of the army, are now determined to resist all reforms, and to carry back Mexico as near as possible, to what it was under the Spaniards. Indeed, we should not be surprized to see a Spanish or French prince in our neighborhood before the expiration of twelve months.

SUMMARY.

Our city has seldom witnessed a scene more imposing than the funeral procession of yesterday. The military array was greater and more brilliant than we recollect to have seen it, and their muffled drums, and measured march, their reversed arms, and mournful ensignia, had a peculiarly solemn effect—while the long procession, composed of the various societies, with their shrouded emblems and melancholy dirges, added every thing to the ceremonial.

Pursuant to previous arrangements, the different societies and associations, the officers of the General and State Governments, the members of the fire companies, the students of the colleges and universities, the public officers, the military, and other individuals invited, assembled at about two o'clock in the neighborhood of the City Hall. Their places in the procession were assigned them by the Marshals, and at at about three o'clock, the procession commenced its line of march, in the following order:

The various volunteer military companies, preceded by the Grand Marshal of the day.

Clergymen of different denominations, wearing appropiate badges.

The Governor and Lieutenant Governor of the State, the Mayor of the city, and the Orator of the day.

The Common Council of the City, attended by City Marshals.

Officers of the U. S. and State Courts, members of the Bar, and of the State Legislature.

Officers of the Army and Navy of the United States.

A number of French residents followed, dressed in deep mourning, bearing a splendid banner inscribed, "A tribute to depared worth."

The Grand Lodge to the State of New York, in splendid Costume. A number of banners were borne inscribed to the illustrious departed.

The Faculty and Students of Columbia College, and of the N. Y. University, dressed in silk gowns.

The Fire Department came next, bearing a splendid urn, with appropriate devices. The different companies marched in respective order, each company with its badges, emblems and banners. The engine No. 5 displayed a magnificent banner with the inscription, "He is dead, but still liveth."

Then followed the Trades' Union Societies—the Journeymen Bakers, Cordwainers, Cabinet and Chair Makers, House Carpenters, Typographical Society, Saddlers, &c., the Hibernian Benevolent Society, Gold and Silver Artificers, Tin and Sheet Iron Workers, and Journeymen Tailors, Smith's Benevolent Society, Musical Instrument Makers, &c.

The URN, and the EAGLE, which were used on this occasion, were the same sacred emblems that were exhibited at the funeral solemnities on the death of WASHINGTON.

The URN was conveyed on an open carriage drawn by four white horses, guarded by the Lafayette Guards, and followed by the Revolutionary Pall bearers, members of the Cincinnati Society, in open barouches.

To form an idea of the immense number of individuals forming the procession, a morning paper states that when General Morton arrived at the Battery, a large number of the persons joining in the ceremonies had not yet left the Park. The scene in Broadway Chatham street, and through the whole route of the procession, far surpassed any exhibition of the kind ever witnessed in this city. The streets were lined with a dense mass of citizens, and every house on the line was filled even to the roof with spectators of the solemn scene. The public buildings, such as the Museums, and others, appeared to contain some thousands, even to the roof.

Shortly after six o'clock the procession began to arrive at Castle Garden. Some detachments of military had previously been stationed on the Battery, and by lining the promenade leading from the entrance on Broadway to the bridge at the garden, kept the ground free for the passage of the procession.

The Garden was in various places, indeed wherever circumstances admitted it, hung with black cloth. In the gallery opposite the rostrum in front of the great saloon, a temporary orchestra was erected, which was shrouded in mourning, and was occupied by the Band and Choir of the New York Sacred Music Society. The rostrum was covered with the American Ensign and with folds of black crape.

The Societies as they entered took their places in different parts of the Garden, and their various banners all shrouded and elevated in every direction, added materially to the solemnity of the scene. The funeral Uurn, with the four greys which drew it, was placed between the fountain and rostrum, the company of Lafayette Guards being stationed around it.

About an hour having elapsed, the funeral service commenced with the following Hymn, arranged to the music of Handel's Dead March in Saul:—

Unveil thy bosom faithful tomb,
Take this new treasure to thy trust,
And give these sacred relics room,
To slumber in the silent dust.

Nor pain, nor grief, nor axious fear
Invade thy bounds. No mortal woes
Can reach the peaceful sleeper here,
While angels watch the soft repose.

Break from his throne, illustrious morn!
Attend, O earth! his sov'reign word;
Restore thy trust—a glorious form
Shall then arise to meet his Lord.

The Right Reverend Bishop Onderdonk, of the Protestant Episcopal Church, then read from the 15th chapter of the First Epistle of St. Paul to the Corinthians, commencing at the 20th verse to the end. He also read part of the Episcopal Service for the Burial of the Dead, during which, and at the close, the following pieces of music were performed and sung:

MARCH—PLEYEL'S HYMN.

RECITATIVE.

I heard a voice from Heaven, saying unto me, Write, blessed are the dead who die in the Lord.

CHORUS.

Even so, saith the Spirit, for they
Rest from their labors.

LUTHER'S HYMN.

Great God! what do I see and hear?
The end of things created,—
The Judge of mankind does appear,
On clouds of glory seated:
The trumpet sounds—the graves restore
The dead which they contained before—
Prepare my soul to meet him.

WHEN THE EAR HEARD HIM.

When the ear heard him, then it blessed him; and when the eye saw him, it gave witness of him.

CHORUS.

Why should we start and fear to die?
What tim'rous worms we mortals are!
Death is the gate of endless joy,
And yet we dread to enter there.

Jesus can make a dying bed
Feel soft as downy pillows are,
While on his breast I ease my head,
And breathe my life out sweetly there.

The most solemn part of the procession (says the Mercantile) we witnessed last night at 11 o'clock. It was the return from Castle Garden of the Horse and Urn, accompanied by the Lafayette Guards, with torches burning, and drum and fife playing the dead march.

The Funeral Oration of the Hon. James Talmadge we did not hear, but by those who had that pleasure, it is spoken of as eminently happy.

The public feeling displayed yesterday—for one deep and solemn feeling seemed to pervade the whole mass of our assembled population—gave a moral effect to a pageant which, for its orderly arrangement and imposing details, was every way worthy of New York. From Providence, Salem, New Haven, at the East; from Alexandria, Fredericksburg, Richmond, on the South; and several towns Westward,—which the melancholy news has reached,—we hear of immediate measures for similar public expressions of feeling. A spontaneous tribute to departed worth, characteristic of a high-toned people. The fitting requiem of one whose noble deeds seemed ever as instinctive as the grief that mourns him, and broad in their benefits, as will be the sorrow for his decease. †

The following are the five distinguished Cadets in each Class, as determined at the examination, which terminated on the 16th instant.

1st Class.	2d Class.
1. William Smith of N. Y.	1. Chas. J. Whiting of Me.
2. John Sanders of Flo.	2. John H. Martindale of N. Y.
3. H. Loughborough of Ken.	3. Geo. W. Morell of N. Y.
4. Thos A. Morris of Inda.	4. Chas. H. Bigelow of Mass.
5. Robt. Allen of Md.	6. Geo. M. Legate of ——
3d Class.	**4th Class.**
1 Jas. L. Mason of ——	1. John W. Gunnison of N. H.
2. Danville Leadbetter of Me.	2. Henry W. Benham of Conn.
3. M. C. Meigs of Penn.	3. Edwin W. Morgan of Penn.
4. Alex. Hamilton of N. Y.	4. Alex. B. Dyer of Misso.
5. Barnabas Conkling of N. Y.	5. John Bratt of N. Y.

We understand that the Polish Committee having exhausted all its funds, have adjourned *sine die*, and that a statement of its expenditures will be published in a few days.

It will afford a large part of the American people great satisfaction to learn that Mr. M'Duffie has resumed his seat in the House of Representatives, in improved health.

The Washington Globe of Tuesday, says;—"The Board of Commissioners under the Convention whth the Two Sicilies, have terminated their fourth session. We undertstand that the Commissioners have disposed of all the cases ready for trial up to this date.

The French Academy of Belles Lettres has proposed for the Volney premium, for next, the following theme:

"To determine the grammatical character of the languages of North America, known under the name of Lenni Lenape, Mehegan and Chippewa."

The premium is a gold medal worth 1200 francs, which our venerable fellow-citizen, Mr. Duponceau, could win against all the world.—[Nat. Gaz.]

We have a pleasant instance, (says the National Gazette of yesterday, how the Secretary of a despotic chief may be used, in the following anecdote related by Sir Harford Bridges, in his account of his mission to Persia:

New Duties of a Secretary.—General Gardanne, on his introduction to Mohammed Ally Meerza, had presented him with a very fine pair of rifle-barrelled pistols, made at Paris, the barrels of which, the General assured the Prince, were worked with such nicety, that a ball delivered from them would fly to the distance of twenty yards, so true as to strike invariably the centre of a piastre, a piece about the size of our half crown. The Prince had received the General in a room which opened to a large walled court, and from the spot where his highness was was seated to the wall was pretty much the distance for which the general had vaunted the precision of his pistol. As soon as he was dismissed, the prince turning to his secretary, who was standing by him, said, 'Come, let's try the Frenchman's pistols; go and hold out your hand against the wall.' The astonished and trembling secretary, after some remonstrance, found himself obliged to obey, and stand the shot.—The prince fired, and fortunately missed his mark.

A Polite Curate.—In the church service, for the thanksgiving of women, on a certain occasion, the curate of ———, afraid of offending his patroness, who was a person of quality, introduced the word lady instead of women; and accordingly said, "Oh, Lord, save this *lady* thy servant;" when the clerk made answer, "Who putteth *her ladyship's* trust in thee.'

Melancholly Occurrence.—Extract of a letter to the Editors of the Philadelphia Commercial Herald, dated Louisville, (Ky.) June 12.—A shocking occurrence took place here last week. A Mr. C. married Miss Buckner last week, a beautiful and interesting woman, of one of our most respectable families. On that evening Mrs. Buckner (the mother of the bride) had a large quantity of custard made, and sent to the houses of her married children. On Sunday Mrs. Foster (her daughter) was taken ill, and died in a few hours. While the company was assembling for her funeral, a daughter of her's became suddenly ill, and the funeral was postponed, that both might be buried together. Before this took place, Mrs. Buckner died; and, one after the other, eight have died; and nine more are dangerously ill.

Poison having been suspected, the servants are all in prison, but there is no evidende, external or internal, to prove the charge. The contents of the stomach show no appearance of poison. The symptoms in all resemble those of Asiatic Cholera; yet no one else in town has been attacked, and not one of that devoted family who avoided the custard. All who ate of it have died or are ill. The physicians and magistrates are all in alarm and bustle, and no two people seem to agree in opinion as to the true cause of this melancholy visitation.

The above deaths from eating custard, had they occurred on "The American Bottom" in Illinois, or in those small neighbourhoods in Kentucky and Tennessee, where that singular disease, "the milk sickness," has been known for years—would have been unquestionably attributed to that complaint. The symptoms of "the milk sickness," which is always traced to drinking the milk or eating the meat of cattle affected in a peculiar manner, are, as described by the western people, precisely those of Asiatic cholera.

Since writing the above, we find the following in the Louisville Focus:

"A report is again going abroad of the prevalence of the Cholera at Louisville. There is no foundation for it. Up to this time, not one of our citizens has exhibited symptoms of that disease. The physicians, two or three days since, supposed that several individuals to whom they were suddenly called, were laboring under attacks of cholera, but the cases proved to be the effects of *poison*. The unfortunate victims were poisoned with arsenic at a wedding party on Sunday evening. Near a dozen have already died, and there are several others who cannot long survive. One family of the first respectability, is almost entirely swept off. The atrocious deed is supposed to have been perpetrated by a negro who is now in jail."

We have copied an account of a dreadful mortaliy in a family of Louisville, Kentucky. The following paragraph from a late number of Galianani's Paris Messenger, furnishes a similar case:

"The Courrier du Midi, of Montpellier, of the 6th instant, relates, that, after a grand dinner given by a widow lady, on the occasion of the marriage of her daughter about three weeks before, supplied by a respectable Restaurateur, out of fifty guests who partook of the feast, thirty were taken ill and showed symptoms of having been poisoned by verdigris. Antidotes were promptly administered, and all the sufferers were relieved and ultimately restored, except the mother of the bride, who expired on the morning of the 5th, after suffering dreadful agonies. This is a new instance of the danger of neglecting to be careful in having copper culinary vessels well tinned."

Sudden Deaths.—The Harrisburg (Pa.) Chronicle of Monday, states the following remarkable instances of sudden death as having occurred recently in Susquehanna township, of that county.—"On Thursday last, Isaac Diller and John Johnston. The former fell down in convulsions while at the plough. The latter carried him home, and complained immediately of sickness, fell down and shortly after expired.—They both died within half an hour."

The New Orleans Bulletin of the 5th ult, says, we understand by the late arrivals, that the Cholera has disappeared from the banks of the Mississippi above, and that there is at present no sickness on the river. There is yet some cholera in this city; there is enough to justify the extremest caution; and at the first appearance of dysentery, no matter from what cause it may be supposed to spring, medical aid should be invoked.

New Orleans June 7.—As rumor is prone to exaggerate in these matters, we have taken the trouble to ascertain from the proper authorities, the number of funerals in New Orleans lately.

During the last month of May, 491 persons were buried.

During the five days of June, 90 persons were buried.

Ten years ago, the average number of interments per month, was about 120. Setting down the increase of population in New Orleans, at 59 per cent. in ten years, the monthly interments, were the city healthy, should not exceed 180.—[News.]

Sudden death.—We learn with much regret, that Col. Cyrus Baldwin, brother of the celebrated engineer, died yesterday morning at his residence in Middlesex Village. He appeared to be in his usual firm health the evening previous. The cause of his sudden decease was attributed to an affection of the heart, and we understand a *post mortem* examination was to be made to-day to ascrtain the fact.—[Lowell Journal.]

It is stated in a West India paper, that the Commissioners appointed for the Colony of Demerara, under the Slavery Abolition Act, for ascertaining the average prices at which slaves were sold between 1st January, 1823, and 31st December, 1830, had closed their investigations, which fixes the average at £116 sterling. The slave population of Demarara is estimated at 70,000.

Public Revenue in New-York.—Revenue accrued in the District of New-York for the 1st quarter, ending the 31st March, 1834, $3,148,455 87. First quater, 1833, $3,123,166 81. Increase, $26,289 06.

These facts we have ascertained at the Custom House this morning. When it is considered that on the 3d of March, 1833, the entire duty on tea, coffee, most kinds of spice, and a great many other articles, was abolished,—and that on the 31st December, 1833, all duties on linens, linen cambrics, worsted stuff goods, manufactures of silk and worsted, and of silk coming from this side of the Cape of Good Hope, were abolished, and that on all goods of every description, one-tenth of the excess above 20 per cent. ad valorem was repealed on the same 31st of December, 1833, the above results appear to us very surprising.

They are, however, in perfect accordance with the fact which we stated a day or two since, that the number of arrivals at this port from foreign countries has been greater by 44 during the first quarter of the present year, than during the corresponding quarter of 1833, and greater than ever before, unless possibly in 1816 and '17, immediately after the war.

The reader will observe that the revenue above stated is the revenue *accrued* [not *collected*] during the quarters mentioned; and of course that cash duties and short credits will not affect the amount. They will also bear in mind that the importations of 1833 were uncommonly large, amounting, in round numbers, to $109,000,000.—[Jour. of Com.]

Many of the goods on which the above revenue accrued have been sent back again, and consequently the drawback allowed will subtract from the revenue.

To remove a Hard Coating or Crust from Glass and Porcelain Vessels.—It often happens that glass vessels, used as pots for flowers and other purposes, receive an unsightly deposit or crust, hard to be removed by scouring or rubbing. The best method to take it off is to wash it with a little diluted muriatic acid. This acts upon it and loosens it very speedily.

A Petrified Papoose.—Some persons employed lately in quarrying stones at Guernsey, Ohio, came across the body of an Indian child completely petrified. This extraordinary specimen was found embedded in a solid mass of rock, and has the appearance of a stone image, somewhat imperfect, to be sure, yet, on the whole, a very fair outline of a young Indian, done in lime stone. A small row of Indian beads (too hard originally to need petrifaction, we suppose,) was found in the same cavity.

[*From the Albany Daily Advertieser.*]

Coincidence.—The 20th of May—the day on which Gen. La Fayette expired, is somewhat marked in Chronological history. On that date of the month, Americus Vespucius sailed on his first voyage of discovery, and that date of the month, witnessed the last mortal agonies of Christopher Columbus.

On the 20th of May, General Lafayette, with an inferior force, baffled the British General, Grant, who, at the head of 7,500 men, attempted to surprise the Marquis, at Barren hill. Lafayett's retreat on that occasion, was pronounced to be a masterly military manœuvre.

It was on the 20th of May, at a later period, that Lafayette's hope of a free French republic, experienced a total destruction, in the ceremonial were Napoleon Bounaparte was declared Emperor.

These coincidences may appear somewhat trivial, but they are curious, and worthy of a passing notice.

Literary.—We learn from the Boston Transcript that—

Lilly, Wait & Co. have in press, and will publish in a few days, the second number of "The Pilgrimage beyond the Sea," from the pen of Professor Longfellow. The admirers of the exquisite sketches contained in the first number, may be assured that the second is fully equal to the former. Among its best papers we would include "The Baptism of Fire," "An Old Soldier," and "The Valley of the Loire."

A valuable musical manuscript by Guillaume de Machault, who was valet de-chambre to Philippe le Bel in 1307, has been discovered in the Royal Library at Paris. It contains several French and Latin authors, ballads, &c. and concludes with a mass, which is supposed to have been sung at the coronation of Charles V. in 1364, and which proves that at that time they were acquainted with the art of composition in four parts.

Encouragement of Learning and the Fine Arts in France.—The annual expenditure of the State and of the Civil List, for the several establishments in favor of Learning and the Fine Arts, is estimated at 120,000*l.* a sum tenfold the amount of that which is expended for similar purposes in Great Britain. This sum is exclusive of various extraordinary grants of large sums of money devoted to the purchase of collections of marbles, coins, and antiquities.

Steamboat Curiosity.—A little boat called the *Caroline*, came into harbor a few days since, which was built in South Carolina, has made her way through Quebeck, &c. here, and is bound, we understand, for the Mississippi, through the Lakes.—[Buffalo Journal.]

Steamboats in the West.—An official list of Steam Boats on the Western waters, on the 1st of January, 1834, gives the whole number 234, whose aggregate amount of tonnage is equal to 39,000 tons—they have cost three millions of dollars. The total yearly expense of running them is four millions and a half.—66 boats went out of service during 1831, '32 and '33—of these, 15 were abandoned as unfit for service; seven were lost by ice, 15 were burned, 24 snagged, and five destroyed by being struck by other boats—thus 51 were lost by accidents. The investments in these boats are now decidedly unprofitable—the business is overdone, and though of incalculable advantage to the valley of the Mississippi, they are too often the ruin of their owners.—[Moor's Price Current.]

Boat Race.—Two of the barge clubs, who have their boats on the Schuylkill, undertook on Saturday afternoon, to have a rowing match. The boats were the Dart and the Falcon—rowed each by six members, with a steersman, all in the uniform of their respective clubs. The distance was three quarters of a mile. The Falcon beat about ten yards. The race was said to have been well contested.

Distressing.—We learn from Capt. Mayhew, of the ship Warren, recently arrived at that port, that Capt. Charles Spooner, of the ship Erie, of Newport, whose extraordinary marriage to Mingatara Ororuth, a native of Otaheite Island, has been lately noticed in most of the papers of this country, was deprived of his bride soon after his marriage, under the following painful circumstances: She had gone into the water to amuse her husband with an exhibition of her extraordinary feats of swimming, for which she is said to have been very remarkable, when she was attacked by a large shark. The shark first seized her by a limb, but releasing his hold, he made another attack, and with one effort of his powerful jaws, severed her body in two. The unhappy husband was a spectator of this awful scene, but could render no assistance.—[Bristol R. I. Gaz.]

Baltimore, June 26th.—The *Marion*, *Morgan*, and *Sharp Shooter* Rifle corps returned to this city yesterday afternoon from the Washington Rail road, bringing with them eleven of the rioters, including one charged with murder. They were all committed to jail. The detachment left the ground at eleven o'clock yestesday morning, up to which time no further disturbance had occurred. The detachment, composed of the Mechanical Volunteers and Independent Blues, which left this city yesterday morning on the same service, were passed about mid-day on their march to the ground.

The London Court Journal of the 10th ultimo, describes London at this period in these terms—

"The season is unfolding prosperously. The Drawing rooms are brilliantly attended;—the last ball at Almack's was one of the best we ever saw, and graced by the appearance of seven fair *débutantes* of the highest rank, beauty, and fashion;—the Italian Opera abounds in attractions;—the English theatres, although no longer either national or classical, afford fertile sources of amusement and discussion;—the Exhibitions are all open, most of them displaying merit of a high order;—the Literary and Scientific Institutions are in full activity;—the streets are alive with equipages;—Kensington gardens and the Parks brilliant with verdure;—our aristocratic absentees have returned from the continent and are commencing their course of spring gaieties;—booksellers, auctioneers, the shops and the places of public amusement, vie with each other in attempts to engage the notice of the public;—in a word, all those objects of attraction which it has been our business and pleasure to illustrate, are re-assembled in renewed interest around us, to excite us to further activity and animate us with freshened energies."

China.—The Chinese Repository, published at the end of February, has the following paragraph:

Since the 9th inst. this city (Canton) has presented a scene of festivities, rejoicings, and congratulations which is usual throughout the Chinese empire during the holidays of new year. In the mean time there has been an *unusual* amount of suffering, especially among the lower classes of the inhabitants. Great numbers of the poor, who were rendered houseless and pennyless by the inundation last August, have perished during the winter. No one can describe the wretchedness of some of these sufferers, and none but an eye-witness can conceive it. Morning after morning, and in the same place, we have seen two, three, and four dead bodies; and in the narrow compass of a few rods, we have seen at noon-day more than 20 individuals stretched on the ground half naked, and either senseless or writhing in the agonies of death, caused by hunger. No man cares for their bodies; none for their souls.

We learn from the Journal of Commerce that letters of a recent date from Liberia, were received here yesterday. They announce the death of Mr. Matthew Laird, and Mrs. Laird, missionaries of the Western Foreign Missionary Society, who sailed from Norfolk on the 6th November last, and arrived at Liberia on the 31st of December.

They died of the African fever, to which almost every new comer is subject. Rev. Mr. Finney, the acting Governor, had been very ill, bnt was recovering. The decease of Mr. and Mrs. Laird will of course be seized upon by Immediate Abolitionists as an evidence that the frown of Providense rests upon the Colony, or at any rate, that a Colony so invaded by disease and death ought not to be supported. Weak minds may possibly be operated upon by such suppositions; but none others can be. The same argument precisely, and with still greater force, might have been urged against the Colonies at Plymouth and Jamestown; and may now be urged against the mission at Bombay. Jamestown and Plymouth are now healthy, and have been so for a century; Liberia may be so too, after the surrounding country is cleared up and cultivated. It would be strange indeed, if the civilization of a Continent was to be accomplished without some loss of life. But if loss of life is so dreadful a thing to the Abolitionists, then we say that *ten lives are saved by the Colony*, in the prevention of the Slave-trade for two or three hundred miles along the coast, *where one is lost.* When a few more such Colonies as Liberia, Sierra Leone, and Cape-town, are planted along the coast, the Slave-trade will be dead forever.

Ship on Fire at Savannah.—We express our acknowledgements to Captain Sisson, of the schr Exit, for the following account of a fire on board the ship Hull, lying in the harbor of Savannah:

"Savannah, June 16.

"The ship Hull of Boston, Captain Knox, laden with cotton, for Liverpool, ready for sea, is on Fire, supposed to be in the after part of the lower hold.—Smoke was discovered coming out of her after hatch early this morning, when she was immediately dropped down below the town, and grounded on about 200 yards from the lower wharf. There are two engines in flats, playing into her, and they are knocking out the forward lumber port to allow her to fill. There are also flats alongside taking out cotton. The bottom on which she is aground is hard sand, and the tide is flowing. Her cargo will be saved, partly demaged; and I have no doubt the ship will also be saved. N. B. Sisson.

"N. B.—Main hatch is nearly burnt through.—With haste. N. B. S.

[The Hull had cleared with a cargo of 928 bales upland, and 8 balus Sea Island Cotton on board.]

The arrival yesterday of the ship Josephine, from Ireland, was quite an unexpected circumstance.—This ship formerly sustained a high reputation, and was considered one of the fastest sailers out of this port. In December, 1832, she was wrecked in Donegal Bay, where she laid nearly buried in the sand for about fifteen months, and was considered as totally lost. In a heavy gale and very high tide last spring, the ship was driven from her bed upon a potato field near the beach. In this situation, after being stripped of her copper, she was observed by an American captain, who, finding her frame was sound, purchased her as she lay, and employed workmen at 6d. each per day, to dig a canal in which he could convey her to the sea. The workmen had only just completed this canal, when another high tide fortunately arose, and swept the ship into deep water. She was then taken to Sligo, repaired, and has safely arrived again at her original home.—[Merc. Adv.]

The Missouri (St. Louis) Republican of the 9th inst. states that the nett profits of the Orphans' Fair, held in that city last week, amounted to $1,505.

A lady who died in England in 1816, bequeathed to six of her horses an annuity of £50 each. These happy and well-fed horses died at the respectable ages of 28, 29, 31, and 33. The last but recently departed this life, having enjoyed his annuity more than seventeen years, and received about £800.

The Cherokees.—In the Senate on Friday, Mr. White of Tennessee, from the Committee on Indian Affairs, in answer to the petition of John Ross and others, of the Cherokee Tribe of Indians, reported the following resolution:

Resolved, That the President of the United States be authorized and requested to cause to be ascertained upon what terms the claims of the State of Georgia and its citizens, to the lands of the Cherokees east of the Missisippi, can be extinguished, and communicate the same to Congress at the next session—and that the further consideration of the memorial be postponed to that time.

Crops in Illinois.—A late paper from Peoria says: "We are informed by the farmers in our vicinity, that the crops have every appearance of being productive. We have had, during the last few days, a succession of warm showers—the fields of small grain never looked better."

The great error in vaccination is said to be the removing it from one subject to another. The original infection, or one remove, will, it seems, always be found a certain antidote to small pox; but after one remove, it is affirmed to be unsafe, and hence is brought into unmerited disrepute.

Coroner's Inquest.—A coroner's inquest was held on Monday afternoon on the body of Mr. George Clayton, which was found floating in the river at the foot of Reed street. Mr. Clayton has been missing for some weeks, and was married only a few days before he disappeared. Virdict—death from accidential drowning.

Pity.—In passing, said a neighbour, a Porter House on one of the Avenues, I saw standing by the fence, a horse just ready to die with old age, and hard and cruel usage. Whilst I was looking at and pitying the once noble, but now most miserable animal, an old man with trembling limbs came staggering and loitering out of the door, and bringing up near the horse, began to belch and vomit, exhibiting the most disgusting, painful, and pitiable sight. Ah! said I, is the monster in human shape who has caused such misery and degradation to come before me?

It will be seen by our Washington letter to-day, that public surmise in relation to the late nominees to the Senate, is fully confirmed. Mr. Stevenson and Mr. Taney have been rejected, and Mr. Butler confirmed without a division. The National Intelligencer gives the vote on Mr. Taney's nomination a little different from our correspondent, making it 18 and 28 instead of 30, 15.

THE POLISH SCYTHEMAN.—A finished lithograph, by a young Pole, is now attracting much attention at the print shops in Broadway. It represents a Polish Scytheman in the full costume of that "indigenous soldier." The impressions are sold for the benefit of the brave Exiles.

Hercules, Jun.—Signor Schiarra, the Italian, now exhibiting at Walnut street Theatre, is one of the most extraordinary wonders of the day. His feats of strength are certainly the most marvellous efforts ever witnessed in this city. He will lift ten, and in some instances, twenty times as much as any other person. It is said he can balance any thing but the Post Office accounts.—[Philad. Intell.]

Surgical Operation.—A very large tumor was removed, a few days since, from the side of a young lady, by Dr. Smiley, of this city. Some idea may be formed of its dimensions from the fact, that after the operation, which diminished one-third of its size, it measured twelve inches and a half in circumference, and weighed only half an ounce less than one pound. No bad symptoms took place, and the young lady has entirely recovered from the effects of the operation. Few instances have occurred in which an operation of such magnitude has been attended with so few bad effects.—[Phil. Nat. Gaz.]

MORE SHIPWRECKS.—The Montreal Gazette, of Thursday, contains some particulars of two other losses at sea, not hitherto reported. One, the Proselyte, of Limerick, with 223 passengers, all of whom have been safely landed at Richibucto, (Nova Scotia,) in a lamentable state of misery, and the other name unknown, but described as being from the west of England, with 280 passengers, 7 of whom only are saved.

[British square rigged vessels bound to the British Colonies, lost this season, including the above, 23. Lives lost, 734, besides all on board of a bark unkuown. Total number of passengers arrived at Quebec to 14th instant, 14,137. Consequently, the lost are to the saved as 1 to 19 and a fraction. Of all the emigrants bound to this port this season, not one has lost his life by shipwreck.—[Jour. Com.]

"Isn't there a large tree standing before your door" inquired a wag of a green looking Jonathan from the country. "Yes—why?" was the answer. "Because," said the wag, "I thought from your appearance that you *grew* in the *shade*."

SURVEYORS' INSTRUMENTS.

☞ Compasses of various sizes and of superior quality warranted.

Leveling Instruments, large and small sizes, with high magnifying powers with glasses made by Troughton, together with a large assortment of Engineering Instruments, manufactured and sold by E. & G. W. BLUNT, 154 Water street, J31 6t corner of Maidenlane.

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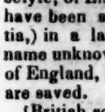

The subscriber having resumed the charge of the above establishment, is now enabled to furnish traders and others with FRESH GARDEN SEEDS, upon very favorable terms, and of the growth of 1833, *warranted* of the best quality.

The greatest care and attention has been bestowed upon the growing and saving of Seeds, and none will be sold at this establishment excepting those raised expressly for it, and by experienced seedsmen; and those kinds imported which cannot be raised to perfection in this country; these are from the best houses in Europe, and may be relied upon as genuine.

It is earnestly requested whenever there are any failures hereafter, they should be represented to the subscriber; not that it is possible to obviate unfavorable seasons and circumstances but that satisfaction may be rendered and perfection approximated.

ALSO—French Lucern, White Dutch Clover, White Mulberry Seed, genuine Mangel Wurtzel, Yellow Locust, Ruta Baga, and Field Turnip Seeds, well worth the attention of *Farmers*.

W. THORBURN,
347 N. Market st. (opposite Post Office.)

☞ Catalogues may be had at the Store; if sent for by mail, will be forwarded gratis. Orders solicited early, as the better justice can be done in the execution.

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NEW YORK FARMER and American Gardener's Magazine.

MECHANICS' MAGAZINE and Register of Inventions & Improvements.

AMERICAN RAILROAD JOURNAL and Advocate of Internal Improvements; and the

NEW-YORK AMERICAN, *Daily, Tri-Weekly*, and *Semi-Weekly*; either or *all* of which may be seen and obtained by those who wish them by calling at 347 *North Market street, Albany*.

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Also, Flange Tires turned complete.

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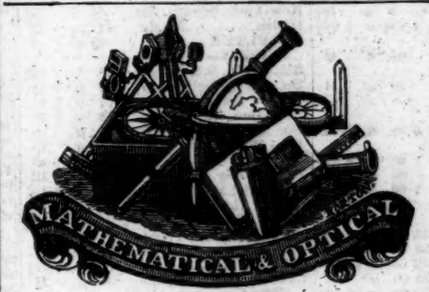

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☞ EWIN & HEARTTE, at the sign of the Quadrant, No. 53 South street, one door north of the Union Hotel, Baltimore, beg leave to inform their friends and the public, especially Engineers, that they continue to manufacture to order and keep for sale every description of Instruments in the above branches, which they can furnish at the shortest notice, and on fair terms. Instruments repaired with care and promptitude.

For proof of the high estimation on which their Surveying Instruments are held, they respectfully beg leave to tender to the public perusal, the following certificates from gentlemen of distinguished scientific attainments.

To Ewin & Hearttе.—Agreeably to your request made some months since, I now offer you my opinion of the Instruments made at your establishment, for the Baltimore and Ohio Railroad Company. This opinion would have been given at a much earlier period, but was intentionally delayed, in order to afford a longer time for the trial of the Instruments, so that I could speak with the greater confidence of their merits, if such they should be found to possess.

It is with much pleasure I can now state that notwithstanding the Instruments in the service procured from our northern cities are considered good, I have a decided preference for those manufactured by you. Of the whole number manufactured for the Department of Construction, to wit: five Levels, and five of the Compasses, not one has required any repairs within the last twelve months, except from the occasional imperfection of a screw, or from accidents, to which all Instruments are liable.

They possess a firmness and stability, and at the same time a neatness and beauty of execution, which reflect much credit on the artists engaged in their construction.

I can with confidence recommend them as being worthy the notice of Companies engaged in Internal Improvements, who may require Instruments of superior workmanship.

JAMES P. STABLER,
Superintendent of Construction of the Baltimore and Ohio Railroad.

I have examined with care several Engineers' Instruments of your Manufacture, particularly Spirit levels, and Surveyor's Compasses; and take pleasure in expressing my opinion of the excellence of the workmanship. The parts of the levels appeared well proportioned to secure facility in use, and accuracy and permanency in adjustments.

These instruments seemed to me to possess all the modern improvement of construction, of which so many have been made within these few years; and I have no doubt but they will give every satisfaction when used in the field.

WILLIAM HOWARD, U. S. Civil Engineer.

Baltimore, May 1st, 1833.

To Messrs Ewin and Hearttе—As you have asked me to give my opinion of the merits of those instruments of your manufacture which I have either used or examined, I cheerfully state that as far as my opportunities of my becoming aquainted with their qualities have gone, I have great reason to think well of the skill displayed in their construction. The neatness of their workmanship has been the subject of frequent remark by myself, and of the accuracy of their performance I have received satisfactory assurance from others, whose opinion I respect, and who have had them for a considerable time in use. The efforts you have made since your establishment in this city, to relieve us of the necessity of sending elsewhere for what we may want in our line, deserve the unqualified approbation and our warm encouragement. Wishing you all the success which your enterprize so well merits, I remain, yours, &c.

B. H. LATROBE,
Civil Engineer in the service of the Baltimore and Ohio Railroad Company.

A number of other letters are in our possession and might be introduced, but are too lengthy. We should be happy to submit them, upon application, to any person desirous of perusing the same. m25

LOCOMOTIVE ENGINES.

☞ THE AMERICAN STEAM CARRIAGECOMPANY, OF PHILADELPHIA, respectfully inform the public, and especially Railroad and Transportation Companies, that they have become sole proprietors of certain improvements in the construction of Locomotive Engines, and other railway carriages, secured to Col. Stephen H. Long, of the United States Engineers, by letters patent from the United States, and that they are prepared to execute any orders for the construction of Locomotive Engines, Tenders, &c. with which they may be favored, and pledge themselves to a punctual compliance with any engagements they may make in reference to this line of business.

They have already in their possession the requisite apparatus for the construction of three classes of engines, viz. engines weighing four, five, and six tons.

The engines made by them will be warranted to travel at the following rates of speed, viz. a six ton engine at a speed of 15 miles per hour; a five ton engine at a speed of 18 miles per hour; a four ton engine at a speed of 22 1-2 miles per hour. Their performance in other respects will be warranted to equal that of the best English engines of the same class, with respect not only to their efficiency in the conveyance of burthens, but to their durability, and the cheapness and facility of their repairs.

The engines will be adapted to the use of anthracite coal pine wood, coke, or any other fuel hitherto used in locomotive engines.

The terms shall be quite as favorable, and even more moderate, than those on which engines of the same class can be procured from abroad.

All orders for engines, &c. and other communications in reference to the subject, will be addressed to the subscriber, in the city of Philadelphia, and shall receive prompt attention.

By order of the Company,
WILLIAM NORRIS, Secretary.

December 2d, 1833.

Fr further information on this subject see No. 49, page 772, Vol. 2, of Railroad Journal.

RAILWAY IRON.

☞ Ninety-five tons of	1 inch by	½ inch,	*Flat Bars* in lengths of 14 to 15 feet counter sunk holes, ends cut at an angle of 45 degrees with splicing plates, nails to suit.
200	do. 1½	do.	do.
40	do. 1¼	do.	do.
800	do. 2	do.	do.
800	do. 2½	do.	do.
soon expected.			

250 do. of Edge Rails of 36 lbs. per yard, with the requisite chairs, keys and pins.

Wrought Iron Rims of 30, 33, and 36 inches diameter for Wheels of Railway Cars, and of 60 inches diameter for Locomotive wheels.

Axles of 2½, 2¾, 2¼, 3, 3¼, 3½, and 3¾ inches diameter for Railway Cars and Locomotives of patent iron.

The above will be sold free of duty, to State Governments and Incorporated Governments, and the Drawback taken in part payment.

A. & G. RALSTON.
9 South Front street, Philadelphia.

Models and samples of all the different kinds of Rails, Chairs, Pins, Wedges, Spikes, and Splicing Plates, in use, both in this country and Great Britain, will be exhibited to those disposed to examine them. d7lmeowr

ENGINEERING AND SURVEYING INSTRUMENTS.

☞ The subscriber manufactures all kinds of Instruments in his profession, warranted equal, if not superior, in principles of construction and workmanship to any imported or manufactured in the United States; several of which are entirely new: among which are an Improved Compass, with a Telescope attached, by which angles can be taken with or without the use of the needle, with perfect accuracy—also, a Railroad Goniometer, with two Telescopes—and a Levelling Instrument, with a Goniometer attached, particularly adapted to Railroad purposes.

WM. J. YOUNG,
Mathematical Instrument Maker, No. 9 Dock street, Philadelphia.

The following recommendations are respectfully submitted to Engineers, Surveyors, and others interested.]

Baltimore, 1832.

In reply to thy inquiries respecting the Instruments manufactured by thee, now in use on the Baltimore and Ohio Railroad. I cheerfully furnish thee with the following information. The whole number of Levels now in possession of the department of construction of thy make is seven. The whole number of the "Improved Compass" is eight. These are all exclusive of the number in the service of the Engineer and Graduation Department.

Both Levels and Compasses are in good repair. They have in fact needed but little repairs, except from accidents to which all instruments of the kind are liable.

I have found that thy patterns for the levels and compasses have been preferred by my assistants generally, to any others in use, and the Improved Compass is superior to any other description of Goniometer that we have yet tried in laying the rails on this Road.

This instrument, more recently improved with a reversing telescope, in place of the vane sights, leaves the engineer scarcely any thing to desire in the formation or convenience of the Compass. It is indeed the most completely adapted to lateral angles of any simple and cheap instrument that I have yet seen, and I cannot but believe it will be preferred to all others now in use for laying of rails—and in fact, when known, I think it will be as highly appreciated for common surveying.

Respectfully thy friend,
JAMES P. STABLER, Superintendant of Construction of Baltimore and Ohio Railroad.

Philadelphia, February, 1833.

Having for the last two years made constant use of Mr. Young's "Patent Improved Compass," I can safely say I believe it to be much superior to any other instrument of the kind, now in use, and as such most cheerfully recommend it to Engineers and Surveyors. E. H. GILL, Civil Engineer.

Germantown, February, 1833.

For a year past I have used Instruments made by Mr. W. J. Young, of Philadelphia, in which he has combined the properties of a Theodolite with the common Level.

I consider these Instruments admirably calculated for laying out Railroads, and can recommend them to the notice of Engineers as preferable to any others for that purpose.

HENRY R. CAMPBELL, Eng. Philad.,
ml 1y Germant. and Norris. Railroad

NEW-YORK PRICES CURRENT:

Corrected from the "New-York Shipping and Commercial List"—Wednesday, June 25, 1834.

ASHES—				
Pot, 1st sort 1834. 100 lbs	4 00	a	—	
Pearl.....do	4 25	a	4 30	
BEESWAX—				
White.....lb	30	a	—	
Yellow.....do	20	a	21	
BREAD—				
Navy.....lb	—	a	3	
Pilot.....do	—	a	4	
Crackers.....do	5½	a	5½	
BRISTLES—				
Russia, first sort ....lb	60	a	65	
Do. common...do	25	a	37½	
American.....do	15	a	44	
CANDLES—				
Mould, tallow .....lb	11	a	13	
Dipped .....do	10	a	11	
Sperm.....do	27	a	30	
CLOVERSEED ..lb	5	a	7	
COAL—				
Liverpool ....chaldron	8 50	a	9 00	
Scotch .....do	6 00	a	6 50	
Sidney & Bridgeport..do	7 50	a	—	
Albion.....do	7 50	a	—	
Virginia .....do	—	a	—	
Anthracite .....ton	5 50	a	6 50	
COCOA—				
Caraccas .....lb	16	a	17	
Trinidad.....do	8	a	10	
St. Domingo.....do	3½	a	—	
Para .....do	5	a		
COFFEE—				
Cuba .....lb	10	a	11½	
Brazil.....do	11	a	12	
Porto Rico.....do	12	a	12½	
Laguira .....do	11	a	12	
St. Domingo.....do	10	a	10½	
Java .....do	12	a	13	
Jamaica.....do	—	a	—	
COPPER—				
Sheathing .....lb	23	a	23½	
Pig .....do	16	a	—	
Old .....do	15	a	16	
Bolt.....do	24	a	—	
CORDAGE—				
Foreign.....lb	9	a	10½	
American .....cwt	9½	a	10	
CORKS—				
Velvet.....gross	38	a	45	
Common .....do	20	a	33	
Phial .....do	5	a	12	
COTTON—				
New Orleans.....lb	11	a	14½	
Upland.....do	10½	a	14	
Alabama .....do	11	a	14½	
Tennessee.....do	11	a	12	
COTTON BAGGING—				
Hemp.....yd	18	a	21½	
Flax .....do	17	a	18	
Do. American .....do	20	a	21	
DUCK				
Russia, U. X. ... } bolt	16 00	a	16 50	
Do. Bruisguins }				
Do. Zotoff & Konop'ff	15 00	a	—	
Do. 3d quality ..do	14 00	a	—	
Do. inferior.....do	11 00	a	13 00	
German, Half .....do	10 00	a	11 00	
Holland, A. A. .....do	24 00	a	—	
Ravens .....do	5 50	a	7 00	
Amer. Joy's, all flax, No. 1 a 8 .....do	14 50	a	11 00	
Do. Phenix Mills, Paterson, flax, No. 1ad.	16 00	a	12 00	
Do. cotton, Paterson, No. 1 a 10 .....yd	26	a	39	
DYE WOODS—				
Braziletto .....ton	—	a	40 00	
Camwood .....do	70 00	a	—	
Fustic, Cuba.....do	23 00	a	25 00	
Do. Tampico....do	21 00	a	—	
Do. Campeachy..do	—	a	—	
Logwood, Camp'hy..do	23 00	a	24 00	
Do. St. Dom..do	16 00	a	18 00	
Do. Jamaica..do	14 00	a	—	
Nicaragua, Bonaire..do	47 00	a	50 00	
Do. Coro....do	45 00	a	55 00	
Do. Hache ..do	70 00	a	75 00	
FEATHERS—				
Live, Foreign .....lb	14	a	30	
Do. American .....do	38	a	40	
FISH—				
Dry Cod.....cwt	2 25	a	2 37½	
Scale .....do	1 50	a	—	
Pickled Cod.....brl	4 50	a	4 75	
Do. Salmon.....do	15 00	a	—	
Smoked do. .....lb	—	a	—	
Mackerel No. 1 ....brl	6 25	a	—	
Do. No. 2.....do	5 50	a	5 62½	
Do. No. 3.....do	3 50	a	—	
Shad, Conn. Mess...do	8 25	a	8 75	
Do. Bucksport, do. ..do	6 50	a	—	
Herrings.....box	—	a	2 50	
Do. Smoked...box	35	a	65	
FLAX—				
Russia .....lb	11	a	—	
American.....do	7½	a	9½	
FLAXSEED—				
Clean.....cask	—	a	—	
Rough .....do	10 25	a	10 50	
FLOUR AND MEAL—				
New York suprâne..brl	4 75	a	—	
Troy.....do	4 75	a	4 81	
Western Canal .....do	4 81	a	5 00	
Philadelphia .....do	—	a	—	
Baltimore Howard st do	5 37½	a	5 50	
Richmond City Mills..do	6 12½	a	6 25	
Do. Country...do	—	a	5 25	
Georgetown.....do	5 25	a	5 50	
Alexandria.....do	5 00	a	5 12	
Fredericksburg .....do	5 00	a	—	
Petersburg .....do	5 00	a	5 25	
Scratched and fine...do	4 62½	a	—	
Middlings, fine.....do	4 25	a	4 50	
Rye Flour .....brl	3 25	a	—	
Indian Meal.....do	3 25	a	3 50	
Do. ..... hhd	16 00	a	16 50	
GRAIN—				
Wheat, North riv..bshl	1 00	a	1 04	
Do. Genesee....do	1 06	a	1 08	
Do. Virginia ....do	1 05	a	1 06	
Do. N. Carolina..do	—	a	—	
Rye, Northern .....do	60	a	62	
Corn, Yellow, North..do	67	a	68	
Do. White, L. I. & N.J..	70	a	—	
Do. Southern.....do	60	a	65	
Barley, North river..do	—	a	—	
Oats, South & North..do	28	a	38	
Peas, white dry..7 bshls	—	a	—	
Do. black eyed....do	—	a	1 00	
Beans.....do	11 00	a	14 00	
GUNPOWDER—				
American .....25 lbs	3 25	a	5 75	
English .....do	3 50	a	6 25	
HEMP—				
Russia.....ton	—	a	170 00	
Manilla.....do	150 00	a	—	
Sisal.....do	—	a	—	
American dew-rot...do	100 00	a	120 00	
Yarns, Kentucky ....lb	—	a	—	
HIDES—				
La Plata & R. Grande..lb	11½	a	13½	
Brazil .....do	9	a	10½	
Do. wet salted ...do	6½	a	6½	
Oronoco .....do	11½	a	12	
W. India & Southern..do	9	a	10½	
S. A. Horse.....piece	1 62½	a	1 87½	
HONEY—				
Havana .....gallon	45	a	46	
HOPS—				
First sort, 1833.....lb	10	a	11	
Second sort, do.....do	—	a	—	
HORNS—				
Ox.....100	5 00	a	20 00	
INDIGO—				
Bengal .....lb	1 20	a	1 60	
Manilla.....do	90	a	1 05	
Caraccas.....do	1 00	a	1 25	
Guatemala .....do	80	a	1 25	
IRON—				
Pig, Engl. & Scotch..ton	38 00	a	46 00	
Do. American .....do	30 00	a	40 00	
Bar, do. .....do	72 50	a	75 00	
Do. Russia, P. S. I..do	90 00	a	—	
Do. new Sable..do	83 00	a	85 00	
Do. Swedes.....do	82 50	a	—	
Do English ass'td..do	70 00	a	72 50	
Sheet, English.....cwt	6 25	a	6 75	
Peru I. Co. flat & sq..ton	—	a	—	
Do. round....do	—	a	—	
Hoop, American.....cwt	6 00	a	6 25	
Do. English.....do	6 25	a	6 50	
IVORY—				
Prime .....lb	1 00	a	1 25	
Under 20 lbs .....tooth	35	a	70	
JUNIPER BERRIES	2	a	3	
LEAD				
Pig .....lb	—	a	4½	
Bar.....do	5½	a	—	
Sheet .....do	6½	a	—	
Old .....do	4	a	—	
LEATHER—				
Sole, Oak tanned....lb	17	a	25	
Do. Hemlock.....do	14	a	17	
Do. damaged.....do	8	a	12½	
Upper, dressed....side	75	a	2 75	
Do. undressed...do	1 00	a	2 25	
LUMBER—				
Boards, N. R.....M ft	16 00	a	17 00	
Do. East'n Pine..do	17 00	a	18 00	
Do. Albany do .pce	17	a	18	
Plank, Georgia do. M ft	25 00	a	35 00	
Heading W. O. .....do	—	a	50 00	
Staves, W. O. pipe..do	35 00	a	60 00	
Do. do hhd....do	37 00	a	40 00	
Do. do brl.....do	35 00	a	36 00	
Do. R. O. hhd....do	24 00	a	25 00	
Hoops.....do	25 00	a	30 00	
Scantling, Pine .....do	15 00	a	16 00	
Do. Oak .....do	20 00	a	25 00	
Timber, Oak.....sq. ft	20	a	25	
Do. Geo. Yell. Pine..do	28	a	30	
Shingles, Cypress..M ft	4	a	10	
Do. Pine..bundle	—	a	—	
MAHOGANY—				
St. Domingo.....foot	6	a	40	
Honduras .....do	5	a	15	
MOLASSES—				
Martinique & Guad..gall	25	a	26	
English Islands.....do	25	a	28	
Havana & Matanzas..do	22	a	25	
Trinidad de Cuba...do	26	a	28	
New Orleans.....do	27	a	30	
NAILS—				
Cut, 4d to 40d.....lb	5½	a	—	
Cut, 3d.....do	6½	a	—	
Cut, 2d .....do	7½	a	—	
Wrought.....do	10	a	14	
NAVAL STORES—				
Tar.....brl	1 75	a	1 87½	
Pitch.....do	—	a	1 75	
Rosin .....do	1 37½	a	2 00	
Turpentine Wilm. soft.	2 25	a	—	
Do. North Co. do..do	2 00	a	—	
Spirits Turpentine..gall	45	a	50	
OILS—				
Florence 30 flasks..box	4 25	a	—	
French 12 bottles..bskt	2 50	a	3 25	
Olive.....gallon	83½	a	85	
Linseed, American...do	90	a	—	
Do. Eng. & Dutch..do	90	a	92	
Whale.....do	—	a	28	
Do. refined.....do	—	a	—	
Sperm, Summer....do	68	a	70	
Do. Winter.....do	85	a	90	
Liver, Straits.....brl	13 00	a	—	
Do. Shore & Bank..do	10 50	a	12 00	
OSNABURGS...yd	8	a	8½	
PROVISIONS—				
Beef, Mess.....brl	9 00	a	10 00	
Do. Prime.....do	5 50	a	6 00	
Do. Cargo.....do	4 75	a	5 00	
Butter, N. Y. Dairy..lb	12	a	15	
Do. Shipping....do	6	a	9	
Do. Philadelphia..do	6	a	8	
Hog's Lard .....lb	7	a	9	
Pork, Mess.....do	12 75	a	14 00	
Do. Prime.....do	9 00	a	10 25	
Do. Cargo.....do	—	a	—	
Cheese, American...lb	6	a	8	
Hams, Virginia.....do	9	a	10	
Do. Northern....do	9	a	—	
RAGS—				
Foreign .....do	2	a	3	
Country .....do	3	a	5	
RICE.....100 lb	2 50	a	3 25	
SALT—				
Turk's Island.....bshl	40	a	—	
Isle of May.....do	—	a	—	
St. Ubes .....do	34	a	—	
Cadiz .....do	30	a	31	
Lisbon .....do	33	a	—	
Liverpool ground....do	27	a	28	
Do. blown ....do	—	a	—	
Do. sack do. ..sack	1 40	a	1 50	
SALTPETRE—				
Refined.....lb	8	a	8½	
Crude E. I.....do	6	a	6½	
SOAP—				
New-York, Brown ..lb	5½	a	6½	
Castile .....do	11	a	13	
SPELTER .....lb	2½	a	3	
SPIRITS—				
Brandy, Ot. D. & Co..gal	1 50	a	1 62½	
Do. Rochelle...do	1 15	a	1 25	
Do. Bordeaux ..do	1 10	a	1 15	
Rum, Jam. 4th proof..do	1 00	a	1 25	
Do. St. Croix, 3d do..do	95	a	—	
Do. Wind. Isl. 3d do..do	80	a	85	
Do. N Orl'ns, 1st do..do	40	a	45	
Do. N. Eng. 1st do ..do	30	a	32	
Gin: Holl'd, Meder Swan	—	a	1 12½	
Do. Hour Glass..do	—	a	1 06	
Do. Pine Apple..do	1 10	a	1 12½	
Do. Imperial ...do	—	a	1 05	
Do. Country .....do	30	a	38	
Whiskey, Rye.....do	21	a	22½	
Cider Brandy .....do	23	a	25	
STEEL—				
German .....lb	10½	a	12½	
English .....do	11	a	14	
Trieste, in boxes....do	7	a	7½	
American.....do	5½	a	6	
SUGARS—				
British Island .....lb	6	a	9	
St. Croix .....do	7½	a	9½	
New Orleans .....do	5	a	6	
Havana, White.....do	8½	a	10	
Do. Brown.....do	7½	a	7½	
Do. Muscovado..do	6½	a	7½	
Porto Rico .....do	7	a	8	
Brazil, White.....do	7½	a	8	
Do. Brown .....do	—	a	7	
Manilla, Brown.....do	7	a	7½	
Lump.....do	12½	a	15	
Loaf .....do	16	a	17	
SUMAC—				
Sicily.....ton	55 00	a	—	
Trieste.....do	35 00	a	—	
American .....do	—	a	30 00	
TALLOW—				
Foreign .....do	7	a	—	
American.....do	6½	a	6½	
TEAS—				
Imperial .....do	55	a	1 06	
Gunpowder.....do	55	a	1 06	
Hyson.....do	45	a	87½	
Young Hyson .....do	35	a	87½	
Hyson Skin.....do	23	a	45	
Souchong .....do	17	a	45	
Bohea .....do	13	a	16	
TIMOTH. SEED..tce	13 00	a	12 00	
TIN—				
Block, S. American..lb	12	a	13	
Do. East India...do	14	a	15	
Plates, ½ ▭.....box	9 75	a	10 00	
TOBACCO—				
Richmond & Petersb..do	4	a	7	
North Carolina .....do	—	a	—	
Kentucky .....do	5	a	8	
Cuba.....do	6	a	14	
St Domingo.....do	7	a	13	
Manufactured, No. 1..do	11	a	13	
Do. No. 2..do	8	a	9	
Do. No. 3..do	7	a	8	
Ladies' Twist.....do	15	a	18	
Cavendish.....do	12	a	37	
TORTOISE SHELL	9 50	a	10 50	
WHALEBONE—				
Slab .....lb	—	a	19	
WINES—				
Madeira.....gall	1 12½	a	2 25	
Sherry .....do	65	a	1 75	
Canary, Cogswell's..do	70	a	1 25	
Teneriffe L. P.....do	75	a	94	
Do. Cargo.....do	50	a	65	
Malaga, dry .....do	36	a	44	
Do. sweet.....do	35	a	42	
Claret.....cask	10 00	a	18 00	
Do. in bottles ....doz	2 00	a	5 00	
Port.....gall	75	a	1 70	
Lisbon .....do	80	a	1 00	
Marseilles Madeira..do	34	a	44	
Catalonia.....do	25	a	35	
WOOL—				
Merino, Am. fleece...lb	44	a	52	
Do. pulled..do	45	a	48	
Common .....do	30	a	32	
Pulled, spinning ....do	38	a	40	
Lambs, 1st quality ..do	48	a	50	
Do. 2d quality...do	30	a	32	
Do. 3d quality...do	21	a	23	

[From the New York Shipping and Commercial List]

REVIEW OF THE NEW YORK MARKET—June 23.

(For three days preceding.)

ASHES.—The demand continues good at the advance noticed in our last publication, and all that were offered have been taken at $4 for Pots, and $4 30 for Pearls. The quantity arriving from the interior is very moderate.

COTTON.—The market, since our last publication, has been very steady, and prices particularly for the fine qualities, which are wanted for home use, are fully maintained.

FLOUR and MEAL.—Western Canal Flour is in very fair demand, and is taken out of market about as fast as it arrives.—The bulk of the sales at $4 87½.

GRAIN.—There have been some considerable sales of Wheat at 105 cents for good Middle County, to 107 cents for Genessee. No Southern afloat. 2000 bushels Northern Rye sold yesterday, at 62 1-2 cents. Corn continues in demand, and all the good Northern Yellow arrived was sold at 68 cents. Last sale of Northern White, 70 cents; Maryland Yellow, 65 a 66: Northern Oats, 28. Export, from 1st to 19th inst., Corn, 9506 bushels; Wheat, 600 bushels.

HIDES.—The market is quite at a stand. We have not a single sale to report.

PROVISIONS.—For Beef and Pork there has been some increase of demand, and the sales for the last two days, have been more extensive, but without any change in prices. Lard is also in fair demand—200 kegs Philadelphia were sold, to arrive, at 9 cents cash. Export from 1st to 19th inst., Beef, 533 bbls.; Pork, 1619 bbls.; Lard, 904 kegs.

SALT.—Liverpool continues abundant, and several sales of Blown, in sacks, have been made at $1 50.

TOBACCO.—There is some inquiry for Kentucky, and prices are well sustained.

FREIGHTS.—There is very little offering for Europe at present—not enough to fill the regular packets to Liverpool and Havre.

[By the David Brown.]

CHARLESTON MARKET.

The wholesale Grocery and Dry Goods business with the country has come nearly to a close, the season being so far advanced that we have but few dealers from the interior.

COTTON.—The transactions in Uplands for the week ending yesterday, have again been to a fair extent, and although they were less extensive than those of the week previous, still they considerably exceed the amount sold at this season of the year. Former prices have been fully maintained, and as choice lots become more scarce as the stock declines, prime and such as border thereon, hove met with more ready sales. The sales in all amount to 4345 bales.

RICE.—The demand for this article has been very limited.

FLOUR.—Upwares of 2000 brls Baltimore and Canal Flour were received during the week, a considerable part of which were disposed of at various prices, from $5 56½ to $6, and a few brls even above that price.

GRAIN.—The arrivals of Corn since our last report, amount to 1300 bushels—three cargoes sold at from 67 to 71 cent—one cargo sold at prices not transpired, and one other was disposed of about a fortnight since, to arrive. 1500 bushels Oats brought 42 cents, and 1200 bushels Peas, at 90 cents. A lot of 237 bales North River Hay, brought 70 cents.

MOLASSES—No importations.

SPIRITS—Of all descriptions dull. 150 brls N. E. Rum, sold at prices not transpired. 70 brls Baltimore Whiskey, at 26 cts, and a small lot Northern Gin at 32.

BACON.—A considerable quantity of Baltimore Bacon has been received during the week, most of which has been readily disposed of.

MACKEREL.—45 brls new No. 3 were received during the week, and sold readily from the wharf, at $5 50 per brl. With but a moderate supply this price cannot long be maintained.

FREIGHTS—Have declined.

THE subscriber having invented a new and useful improvement in the method of metallic packing for Steam Engine Pistons, and valves, specimens of them may be seen in Mr. Burden's new steam vessel; also on reference to Mr. I. P. Allaire, Engineer, and the Troy Steamboat Company. These improvements he will be happy to introduce on the most reasonable terms; and having taken lawful means to secure the same by Letters Patent from the Government of the United States, which he expects to receive in a few days, (and of which due notice will be given) hereby cautions all persons from making use of said improvements, unless through him or his agents. NEIL SNODGRASS, C. E.
J27 1t No. 87 Pearl street.

☞ TOWNSEND & DURFEE, of Palmyra, *Manufacturers of Railroad Rope*, having removed their establishment to Hudson, under the name of *Durfee, May & Co.* offer to supply Rope of any required length (without splice) for inclined planes of Railroads at the shortest notice, and deliver them in any of the principal cities in the United States. As to the quality of Rope, the public are referred to J. B. Jervis, Eng. M. & H. R. R. Co., Albany; or James Archibald, Engineer Hudson and Delaware Canal and Railroad Company, Carbondale, Luzerne county, Pennsylvania.
Hudson, Columbia county, New-York, }
January 29, 1833. }

NOTICE TO MANUFACTURERS.

☞ SIMON FAIRMAN, of the village of Lansingburgh, in the county of Rensselaer, and state of New-York, has invented and put in operation a Machine for making Wrought Nails with square points. This machine will make about sixty 6d nails, and about forty 10d nails in a minute, and in the same proportion larger sizes, even to spikes for ships. The nail is hammered and comes from the machine completely heated to redness, that its capacity for being clenched is good and sure. One horse power is sufficient to drive one machine, and may easily be applied where such power for driving machinery is in operation. Said Fairman will make, vend and warrant machines as above, to any persons who may apply for them as soon as they may be made, and on the most reasonable terms. He also desires to sell one half of his patent right for the use of said machines throughout the United States. Any person desiring further information, or to purchase, will please to call at the machine shop of Mr. John Humphrey, in the village of Lansingburgh.—August 15, 1833. A29 tf RM&F

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Where many new works are just received. J28